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19” WIDESCREEN LCD MONITOR
WITH INTEGRATED DIGITAL VIDEO RECORDER

Instruction Manual

English Version 4.0
French and Spanish manuals available on included software CD and online at www.lorexcctv.com



MODELS:
L19WD Series

LOREX™

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Thank you for purchasing this product. Lorex is committed to providing our customers with a high quality, reliable security solution.

This manual refers to the following models:

- L19WD800 Series (8-channel):
  L19WD843, L19WD804321, L19WD804321F, L19WD804321P
- L19WD1600 Series (16-channel):
  L19WD1600501, L19WD1608501, L19WD1616501

Lorex may introduce new model numbers for the above series.

To learn more about this system and our complete range of accessory products, along Manuals, Quick Start Guides, and Firmware, please visit our website at:

www.lorexcctv.com



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RICK OF ELECTRIC SHOCK
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the products ‘ enclosure that may be of sufficient magnitude to constitute a risk of electric shock



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT.

BEFORE YOU START

THIS PRODUCT MAY REQUIRE PROFESSIONAL INSTALLATION

LOREX IS COMMITTED TO FULFILLING YOUR SECURITY NEEDS



- We have developed user friendly products and documentation. Please read the Quick Start Guide and User Manual before you install this product.



- Consumer Guides and Video Tutorials are available on our web site at **www.lorexcctv.com/support**



- If you require further installation assistance, please visit **www.lorexcctv.com/installation** or contact a professional installer.



- Please refer to the “Need Help” insert for technical support and customer care information.



- Please note that once the components of this product have been unsealed, you cannot return this product directly to the store without the original packaging.

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AVANT DE COMMENCER

CE PRODUIT POURRAIT EXIGER UNE INSTALLATION PROFESSIONNELLE

LOREX S'ENGAGE À SATISFAIRE VOS BESOINS SÉCURITAIRES

• Veuillez lire le guide de démarrage rapide et le mode d'emploi avant d'installer ce produit.

• Les guides du consommateur et les séances de tutorat vidéo sont disponibles sur l'Internet en visitant **www.lorexcctv.com/support**

• Si vous avez besoin de l'aide pour l'installation, veuillez visiter **www.lorexcctv.com/installation** ou contactez un spécialiste en installation

• Veuillez référer à l'insert "Need Help" pour ob¬tenir de l'information sur le service à la cli-entèle et le support technique

• Veuillez constater qu'une fois que les com¬posantes de ce produit ont été retirées de l'emballage, vous ne pourrez plus retourner ce produit directement au magasin.

ANTES DE EMPEZAR

ESTE PRODUCTO PUEDE EXIGIR UNA INSTALACIÓN PROFESIONAL

LOREX SE COMPROMETE A SATISFACER SUS NECESIDADES EN SEGURIDAD

• Favor de leer la guía de instalación rápida y la guía del usuario antes de instalar este producto.

• Puede conseguir las guías del consumidor y los cursos en enseñanza video sobre el Internet visitando **www.lorexcctv.com/support**

• Si necesita ayuda para la instalación, visite **www.lorexcctv.com/installation** o contacte un especialista en instalaciones

• Favor de referir al documento "Need Help" para obtener información acerca del servicio al cliente y al soporte técnico

• Favor de notar que una vez que los compo-nentes de este producto han sido removidos del embalaje, no podrá devolver este producto di-rectamente a la tienda



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NEED HELP?



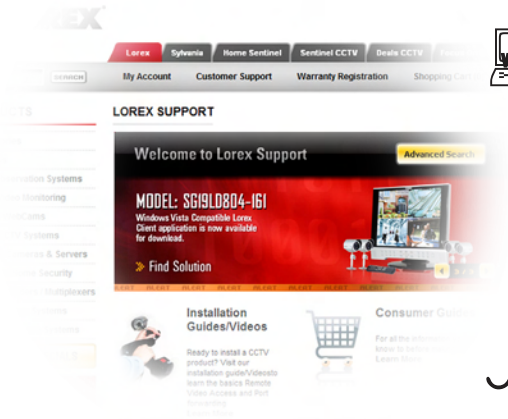
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CONTACT US FIRST

DO NOT RETURN THIS PRODUCT TO THE STORE

Please make sure to register your product at www.lorexcctv.com to receive product updates and information

3 EASY WAYS TO CONTACT US:



Online:

Product Support is available 24/7 including product information, user manuals, quick start up guides and FAQ's at **www.lorexcctv.com/support**

To order accessories, visit
www.lorexcctv.com



By Email:

Technical Support (for technical/installation issues)
support@lorexcorp.com

Customer Care (for warranty and accessory sales)
customerservice@lorexcorp.com

Customer Feedback
info@lorexcorp.com



By Phone:

NORTH AMERICA: 1-888-425-6739 (1-888-42-LOREX)
MEXICO: 1-800-514-6739
INTERNATIONAL: +800-425-6739-0

(Example: From the UK, dial 00 instead of +)

Technical Support (for technical/installation issues)
Press option 1 for English, and then press option 1

OR

Customer Care (for warranty and accessory sales)
Press option 1 for English, and then press options 2 to 5

NECESITA AYUDA

COMUNÍQUESE PRIMERO CON NOSOTROS



VOUS AVEZ BESOIN D'AIDE?

CONTACTEZ-NOUS D'ABORD

NO DEVUELVA ESTE PRODUCTO A LA TIENDA

Cerciórese de por favor colocar su producto en www.lorexcctv.com/registration para recibir actualizaciones y la información del producto

3 MANERAS SENCILLAS DE COMUNICARSE CON NOSOTROS:

En línea:

apoyo al producto disponible 24/7 incluyendo información del producto, manuales para el usuario, guías de inicio rápido y preguntas más frecuentes en
www.lorexcctv.com/support

Para colocar pedidos de accesorios, visite
www.lorexcctv.com

Por Correo Electrónico:

soporte técnico (para asuntos técnicos/la instalación)
support@lorexcorp.com
O
servicio al cliente (respecto a la garantía y a la venta de accesorios)
customerservice@lorexcorp.com

Comentarios de cliente
info@lorexcorp.com

Por Teléfono:

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MEXICO: 1-800-514-6739
INTERNACIONAL: +800-425-6739-0
(Ejemplo: Desde el Reino Unido, marque el 00 en lugar del +)
soporte técnico (para asuntos técnicos/la instalación) oprima la opción 1 para inglés y luego oprima la opción 1
O
servicio al cliente (respecto a la garantía y a la venta de accesorios) oprima la opción 1 para inglés y luego oprima las opciones 2 A 5

sus opiniones son bienvenidas en
info@lorexcorp.com
para colocar pedidos de accesorios, visite
www.lorexcctv.com

NE RETOURNEZ PAS CE PRODUIT AU MAGASIN

Veuillez veiller à enregistrer votre produit à www.lorexcctv.com/registration pour recevoir des mises à jour et l'information de produit

3 FAÇONS FACILES DE NOUS CONTACTER:

En ligne:

le support des produits est disponible 24 heures sur 24, 7 jours sur 7, y compris les informations sur les produits, les guides de l'utilisateur, les guides de démarrage rapide et les foires à questions
www.lorexcctv.com/support
Pour commander des accessoires, visitez
www.lorexcctv.com

Par Courriel:

support technique (pour les questions techniques et d'installation) **support@lorexcorp.com**
OU
service à la clientèle (pour les questions de garantie et les ventes d'accessoires)
customerservice@lorexcorp.com

Commentaires des clients
info@lorexcorp.com

Par Téléphone:

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MEXICO: 1-800-514-6739
INTERNATIONAL: +800-425-6739-0
(Exemple: À partir du Royaume-Uni, composez 00 au lieu de +)
support technique (pour les questions techniques et d'installation) appuyez sur l'option 1 pour l'anglais, et ensuite sur l'option 1
OU
service à la clientèle (pour les questions de garantie et les ventes d'accessoires) appuyez sur l'option 1 pour l'anglais, et ensuite sur les options 2 à 5

nous serions heureux de recevoir vos commentaires à info@lorexcorp.com pour commander des accessoires, visitez
www.lorexcctv.com

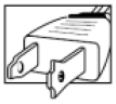
Important Safeguards

In addition to the careful attention devoted to quality standards in the manufacturing process of your video product, safety is a major factor in the design of every instrument. However, safety is your responsibility too. This sheet lists important information that will help to assure your enjoyment and proper use of the video product and accessory equipment. Please read them carefully before operating and using your video product.

Installation

1. **Read and Follow Instructions** - All the safety and operating instructions should be read before the video product is operated. Follow all operating instructions.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - Comply with all warnings on the video product and in the operating instructions.
4. **Polarization** - Do not defeat the safety purpose of the polarized or grounding-type plug.

   - o A polarized plug has two blades with one wider than the other.
   - o A grounding type plug has two blades and a third grounding prong.
   - o The wide blade or the third prong is provided for your safety.
   - o If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet

5. **Power Sources** - This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your location, consult your video dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.
6. **Overloading** - Do not overload wall outlets of extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.
7. **Power-Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the video product.
8. **Ventilation** - Slots and openings in the case are provided for ventilation to ensure reliable operation of the video product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video equipment on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the video product manufacturer's instructions have been followed.
9. **Camera Extension Cables** – Check the rating of your extension cable(s) to verify compliance with your local authority regulations prior to installation.
10. **Water and Moisture** - Do not use this video product near water. For example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, near a swimming pool and the like.

    Caution: Maintain electrical safety. Power line operated equipment or accessories connected to this unit should bear the UL listing mark of CSA certification mark on the accessory itself and should not be modified so as to defeat the safety features. This will help avoid any potential hazard from electrical shock or fire. If in doubt, contact qualified service personnel.
11. **Accessories** - Do not place this video equipment on an unstable cart, stand, tripod, or table.

    Use this video product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the video product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer

12. **Attachments** - Do not use attachments unless recommended by the video product manufacturer as they may cause a hazard.

Service

13. **Servicing** - Do not attempt to service this video equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
14. **Conditions Requiring Service** - Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions.
    - **A.** When the power supply cord or plug is damaged.
    - **B.** If liquid has been spilled or objects have fallen into the video product.
    - **C.** If the video product has been exposed to rain or water.
    - **D.** If the video product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
    - **E.** If the video product has been dropped or the cabinet has been damaged.
    - **F.** When the video product exhibits a distinct change in performance. This indicates a need for service.
15. **Replacement Parts** - When replacement parts are required, have the service technician verify that the replacements used have the same safety characteristics as the original parts. Use of replacements specified by the video product manufacturer can prevent fire, electric shock or other hazards.
16. **Safety Check** - Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the video product is in safe operating condition.
17. **Wall or Ceiling Mounting** - The cameras provided with this system should be mounted to a wall or ceiling only as instructed in this guide, using the provided mounting brackets.
18. **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Use

19. **Cleaning** - Unplug the video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
20. **Product and Cart Combination** - Video and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the video product and car combination to overturn
21. **Object and Liquid Entry** - Never push objects for any kind into this video product through openings as they may touch dangerous voltage points or “short-out” parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product
22. **Lightning** - For added protection for this video product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power line surges. The manufacturer’s instructions and use a mounting accessory recommended by the manufacturer.

General Precautions

1. All warnings and instructions of this manual should be followed
2. Remove the plug from the outlet before cleaning. Do not use liquid aerosol detergents. Use a water dampened cloth for cleaning
3. Do not use this unit in humid or wet places
4. Keep enough space around the unit for ventilation. Slots and openings in the storage cabinet should not be blocked
5. During lightning storms, or when the unit is not used for a long time, disconnect the power supply, antenna, and cables to protect the unit from electrical surge

FCC CLASS B NOTICE

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not in-stalled and used in accordance with the instruction, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment on and off), the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio or television technician for assistance

This equipment has been certified and found to comply with the limits regulated by FCC, EMC, and LVD. Therefore, it is designated to provide reasonable protection against interference and will not cause interference with other appliance usage.

However, it is imperative that the user follows this manual' guidelines to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard injury

In order to improve the feature functions and quality of this product, the specifications are subject to change without notice from time to time.

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L19WD Series Features



- High resolution 19” LCD widescreen monitor with integrated digital video recorder
- Built-in Pentaplex Digital Video Recorder: View, Record, Playback, Back Up & Remotely Control the system simultaneously
- Real-Time Recording: 240/480 FPS @ CIF Resolution (8/16ch)
- H.264 video compression technology provides longer recording time and improved network transmission speed
- Internet Remote Monitoring (software included) and web browser access
- Mouse-driven navigation (mouse included) and graphical user interface
- Message Master software (included) allows you to send text and pictures from a remote location
- Installer friendly – Easy Quick Start Guide and Toll-Free Technical Support
- Easy to use Graphical User Interface with transparent menus and mouse navigation (mouse included)
- Multiple control options: mouse, front panel buttons, remote control, remote access software
- Multiple video out options: Spot Video Out lets you control what shows on your Public View Monitor. Monitor Out also allows you to view images on a slave monitor
- Tri-lingual Display (English, Spanish, French)
- Screen saver for energy efficiency
- Wall mountable (VESA standard)
- Stand with cable management solution for tidier installation
- Environmentally friendly, recyclable packaging material
- Covert Camera - record without displaying camera image
- Continuous Recording with Motion Event logging for easy event searching
- Panic recording mode assures best quality of recording in emergency situations
- Selectable audio recording
- Programmable motion detection
- Capture activities prior to an event with programmable pre-event recording
- Quick search with bookmark recording
- Advanced user authorization supporting up to 10 users
- Security Certified Hard Drive with SATA interface, 100% duty cycle for optimal performance in the commercial video security market. Expandable up to 1000GB
- USB port for convenient transferring of critical data to USB flash drive
- Automatic watermarking of video files for secure data encryption

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Getting Started

The system comes with the following components:



1 X INTEGRATED LCD DVR SYSTEM WITH PRE-INSTALLED HDD*



1 X POWER ADAPTER
1 X POWER ADAPTER CABLE



1 X REMOTE CONTROL



1 X MOUSE (PS/2)



1 X ETHERNET CABLE



1 X COMBINED HARDWARE & SOFTWARE MANUAL
1 X QUICK START GUIDE
1 X SOFTWARE CD

***HARD DRIVE SIZE, NUMBER OF CHANNELS, AND CAMERA CONFIGURATION MAY VARY BY MODEL. PLEASE REFER TO YOUR PACKAGE FOR SPECIFIC CONTENT DETAILS.**

CHECK YOUR PACKAGE TO CONFIRM THAT YOU HAVE RECEIVED THE COMPLETE SYSTEM WITH ALL COMPONENTS SHOWN ABOVE.

Basic Setup

Make the following connections prior to starting the system for the first time.



Connect the cameras to the monitor

Please see the Camera Installation section of this manual for details.

ATTENTION: Test the cameras prior to permanently mounting them by temporarily connecting the cameras and cables to your system.



2. Connect the Ethernet cable

Connect one end of the Ethernet cable (for remote monitoring) to the LAN port on a router (not included), and the other end to the Ethernet port on the back of the system.



3. Connect the mouse

Connect a PS/2 mouse to the port on the back of the system.



4. Connect the power cable

Connect one end of the power adaptor to the monitor and the other end to an electrical outlet.

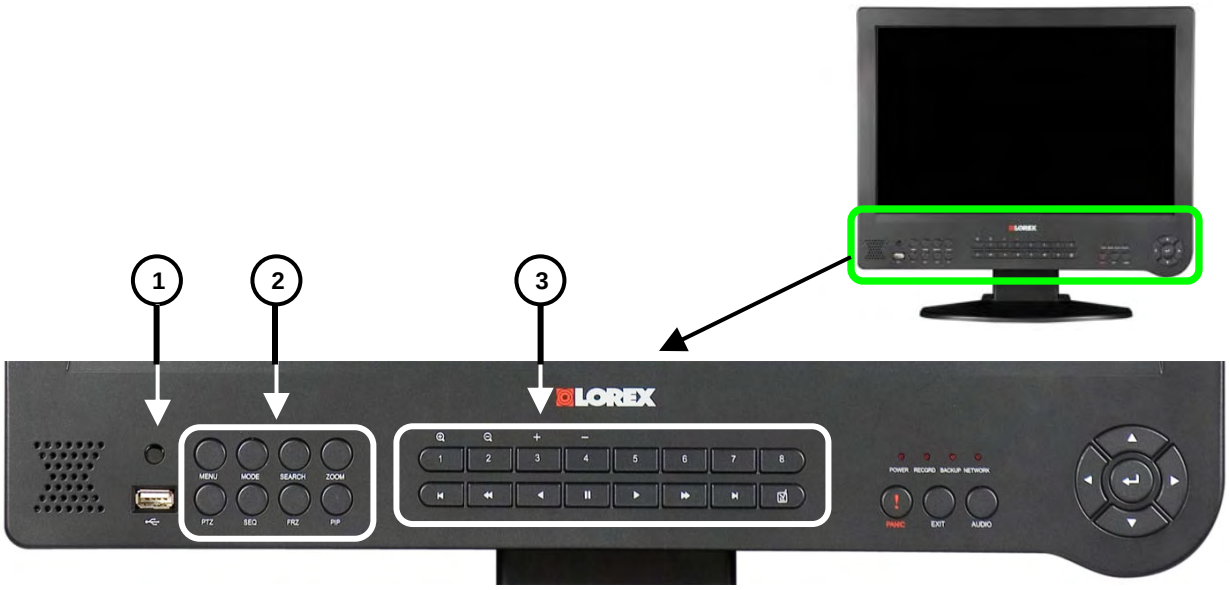
Note: The system automatically powers on once connected to a power source. By default, all connected cameras are set to record in Continuous Mode when the system is first powered on.



5. Login to the system

After the initial startup sequence, you will need to login to the system when accessing the System Main Menu (press the MENU button). To login, leave the default user as **ADMIN**. Leave the password field **blank** and click **OK**. Fore more details, see “Starting the System,” page 24.

Front Panel



8-channel model

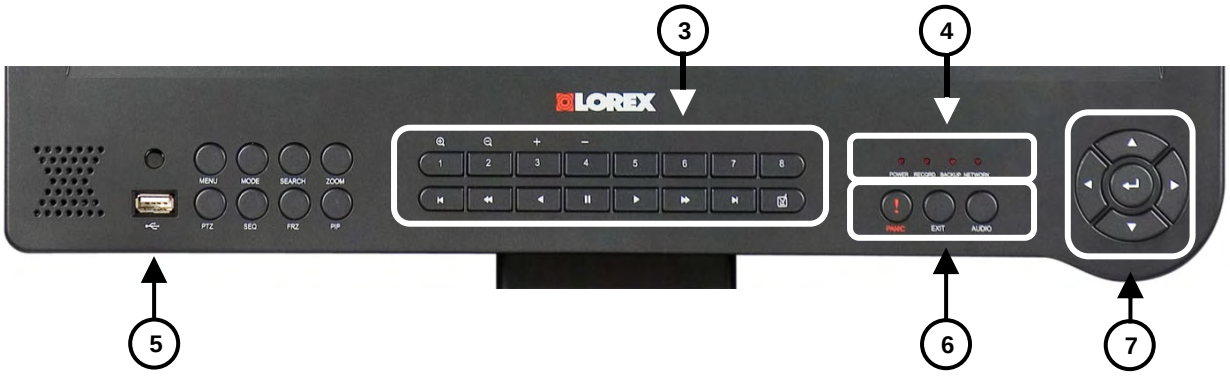
1. **IR Sensor**: Receives the infrared signal from the remote control.

2. **Function Buttons**: The left set of function buttons consist of the following:
    - **Menu**: Press to enter the System Main Menu; press and hold to power off the monitor.
    - **Mode**: Switch between screen displays – full-screen, quad, and split-screen view.
    - **Search**: Search for recorded video on the HDD.
    - **Zoom:** Zoom in/out of an image using digital zoom.
    - **PTZ**: Open the control menu for Pan, Tilt, Zoom – a PTZ camera (not included) must be connected to the system to make use of the PTZ menu.
    - **SEQ**: Activate sequence function in any display mode.
    - **FRZ:** Freeze live image.
    - **PIP:** Picture-in-Picture mode.

3. **Numeric Keypad and Playback Buttons***:
    - **1~8**: Press to view each channel of the system in full-screen mode.
    - **1+**: In PTZ Mode: zoom in.
    - **2-**: In PTZ Mode: zoom out.
    - **3+**: In PTZ Mode, channel up.
    - **4-**: In PTZ Mode, channel down.

*Only on L19WD800 Series. 16-button numeric keypad found on L19WD1600 Series

Front Panel (cont'd).



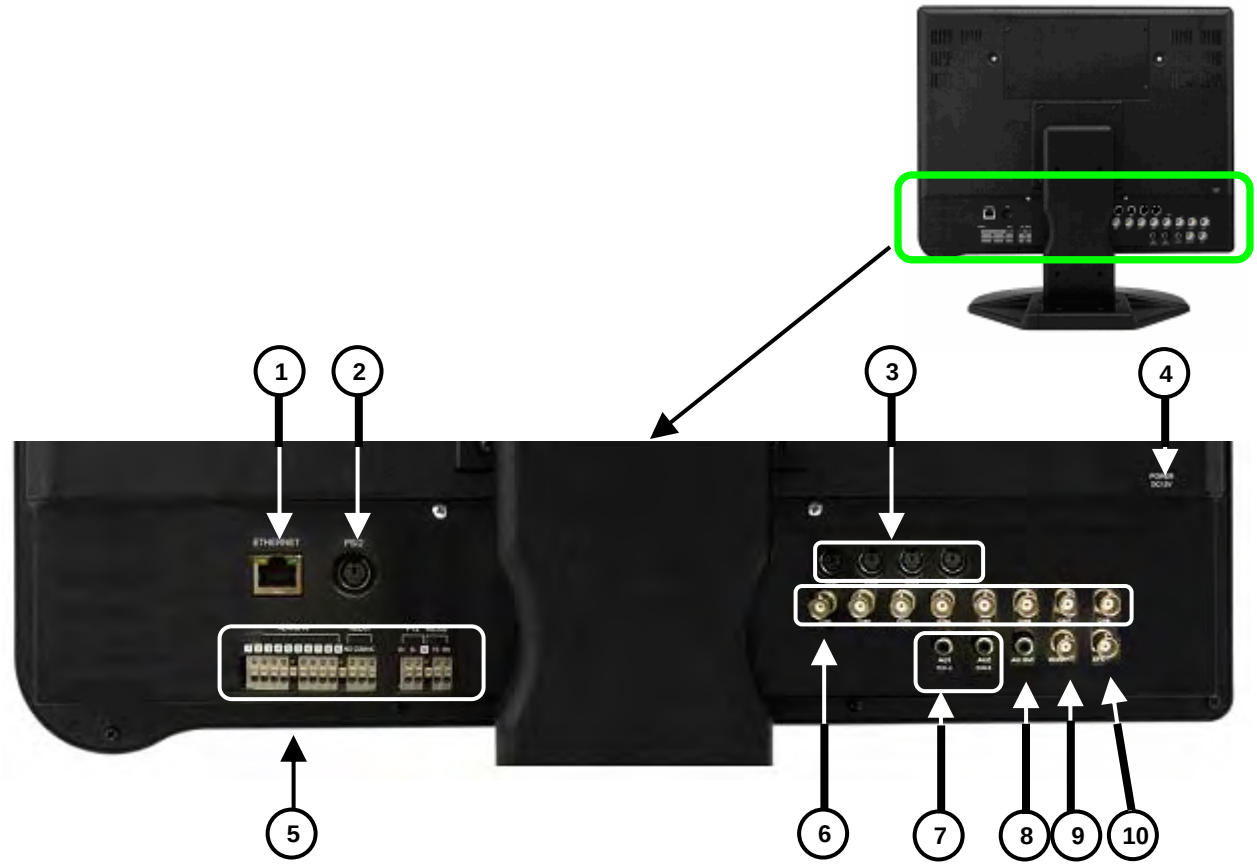
3. **Numeric Keypad and Playback Buttons (cont'd)**:
   - ⏮ In Playback Mode, jump to start of recording
   - ⏪ Slow motion speeds in Forward Playback: 1/4, 1/8, 1/16, and 1/32; Increase playback speed in Reverse Playback: 2X, 4X, 16X, and 32X.
   - ◀ Reverse playback; in Login Menu, also used as Backspace to delete digits.
   - ▶ Play
   - ⏸ Pause
   - ■ Stop
   - ⏩ Increase playback speed in Forward Playback: 2X, 4X, 16X, and 32X; Slow motion speeds in Reverse Playback: 1/4, 1/8, 1/16, and 1/32.
   - ⏭ In Playback Mode, jump to end of recording
   - In Playback Mode, set a bookmark for future reference in Search Mode.
4. **LED Indicator**: Four lights show the status of the system: Power, Record, Backup, and Network.
5. **USB Port**: USB 2.0 port for data backup and uploading firmware updates.
6. **Function Buttons**: The right set of function buttons consist of the following:
   - **Panic**: In an emergency, press Panic for Continuous recording with High Quality Video. Panic Recording overrides any active recording mode or function of the system.
   - **Exit**: Press to exit menus / functions or to stop playback.
   - **Audio**: Select audio channel; mute internal speaker.

7. **Navigation Arrows**: Use the arrows and Enter button to select Menu options.



   - **Enter**: Forward & Reverse Playback, Pause; hold to display system information.
   - **Left**: Increase playback speeds in Reverse playback; Slow Motion speeds in Forward playback
   - **Right**: Increase playback speeds in Forward playback; Slow Motion speeds in Reverse playback
   - **Up**: In Live mode or during playback, increase the volume of the internal speaker.
   - **Down**: In Live mode or during playback, decrease the volume of the internal speaker.

Rear Panel



Ethernet Port: Connects the System to a router or switch for networking purposes.
PS/2 Mouse: Dedicated connection for a PS/2 mouse.
6-pin DIN Camera Inputs*: Channels 1~4 for 6-pin DIN cameras. Cameras with 6-pin DIN connectors draw power from the system; additional power adaptors are not required.
DC Input: Connects the system to the power adaptor.
Relay/PTZ/RS-232 Block: These terminals send a signal to a secondary device or control Pan, Tilt, Zoom cameras.
BNC Camera Inputs†: BNC video ports for channels 1-8; cameras with BNC connection require an additional power adaptor.
RCA Audio Inputs (2)**: Audio inputs for channels 1~4 and channels 5~8.
Audio Out: Audio output port to connect to speakers, or a secondary DVR, or TV.
Monitor Out: Connect a secondary monitor; directly reflects the onscreen images.
Spot Out: Spot video output to a secondary monitor to view the active video channels in sequence. Use in situations where the system will be in a backroom, but you want to display images to the public, whether for theft deterrence or advertising purposes.

*6-pin DIN ports only on L19WD800 Series
**Four audio inputs on L19WD1600 Series
†16 BNC ports and 16 alarm ports available on L19WD1600 Series

Camera Installation

Before you install a camera*, carefully plan where and how it will be positioned, and where you will route the cable that connects the camera to the DVR.

Installation Warnings

- Select a location for the camera that provides a clear view of the area you want to monitor, which is free from dust, and is not in line-of-sight to a strong light source or direct sunlight.
- Plan the cables' route so that it is not close to power or telephone lines, transformers, microwave ovens or other electrical equipment that could interfere with the DVR.
- Select a location for the camera that has an ambient temperature between 14°F~113°F (-10°C~45°C)
- If you plan to install the camera in a location that has conditions not recommended in this manual, consult with a professional installer and consider use of a separate camera cover or housing
- Before starting permanent installation, have another person hold the camera for you while you verify its performance by observing the image on a monitor.

Camera Stand Installation

1. Attach the pedestal to the ceiling, wall or other surface by the base using the provided screws.

2. The mounting bracket must be attached to a structural device such as a wall stud or ceiling rafter using the supplied screws.

3. Attach the camera to the pedestal. Adjust the angle of the camera, and tighten the thumbscrew to set the position

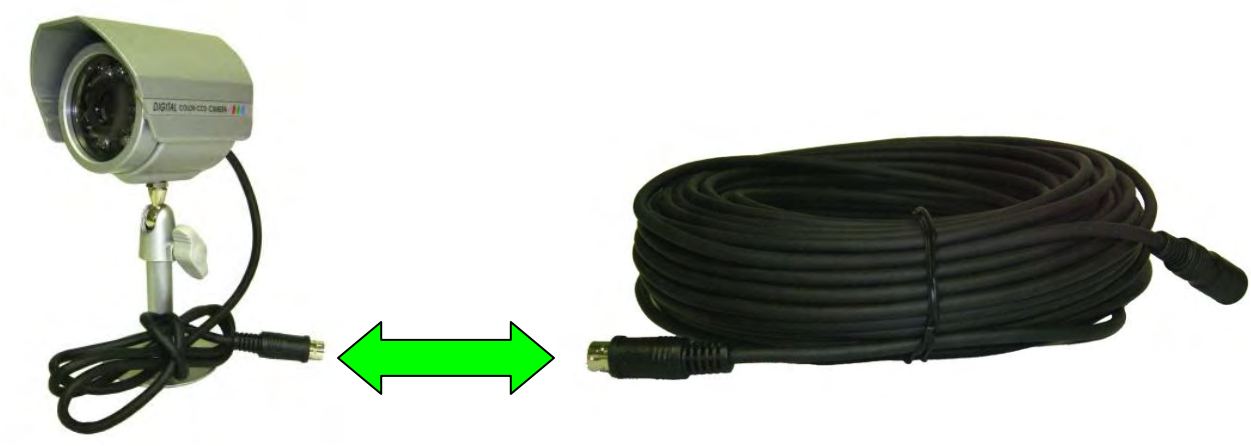
Note: The camera can be attached to the stand using the screw point on the top or the bottom (to maintain proper camera alignment). This prevents the image from becoming inverted.



* Camera may not be exactly as shown

Connecting DIN Cameras

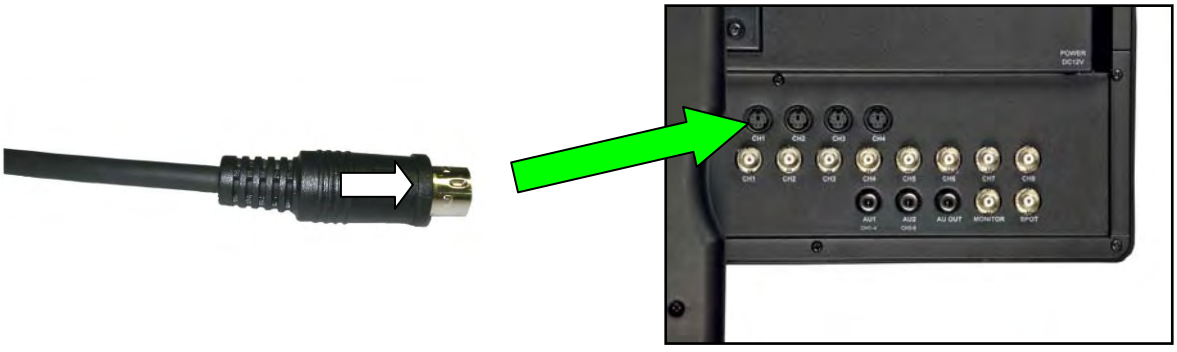
Connect the female end of the extension cable (not included) to the camera.



Note: Ensure that the arrows on the DIN Camera Cable and the DIN Extension Ca ble point together when connecting the ca ble. If the pins in the DIN Cable are bent, t he camera will not function.



Connect the male end of the extension cable to an open DIN camera input on the rear panel of the system.



Note: The arrow on the DIN camera should be facing up when connecting the DIN Extension Cable to the system.

Connecting BNC Cameras

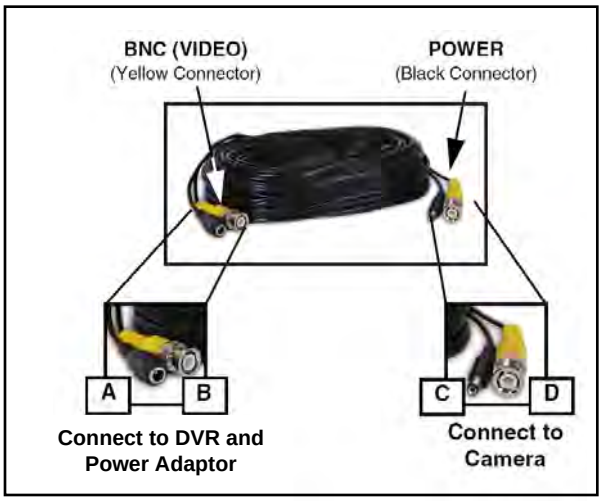
1. Connect the extension cable to the Camera and system:

A. Connect the Barrel Power connector to a power adaptor.

B. Connect the BNC connector to an available BNC Port on the DVR.

C. Connect the Male Power connector to the Camera.

D. Connect the BNC connector to the Camera.

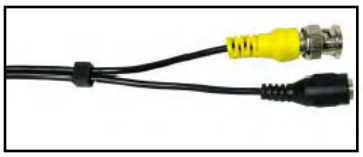


2. Connect the Power Adaptor to a wall outlet.

ATTENTION: The ends of the extension cable are NOT the same - one end has a Male power port, and the other has a Female power port. Before permanently running the Camera Extension Cable, make sure that the cable has been oriented between the Camera and the unit correctly.

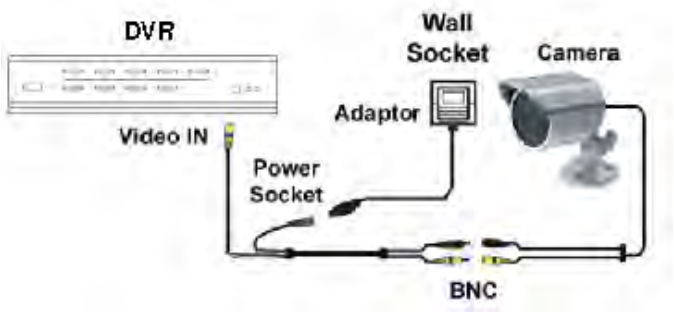


Male Power Port - The male power port end of the Extension cable connects to the Camera.



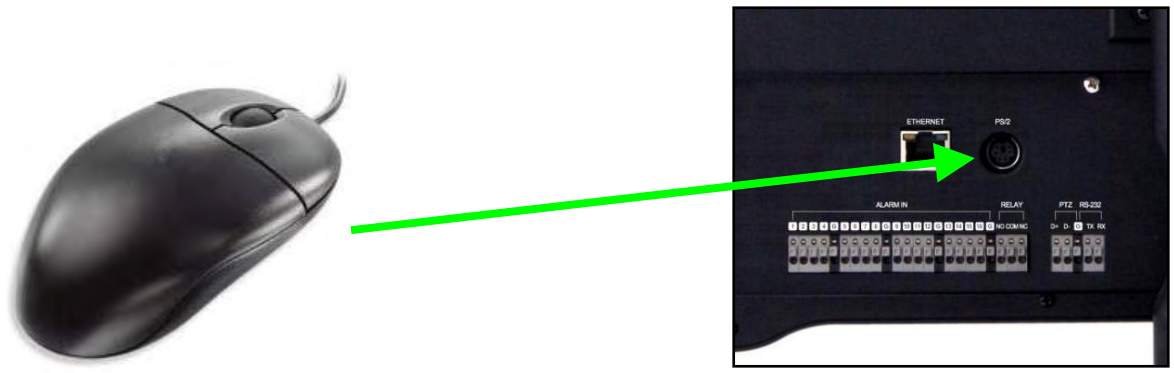
Female Power Port - The female power port end of the Extension cable connects to the Power Adaptor.

Camera Connection Diagram



Mouse Control

This system has been designed to use a PS/2 mouse or remote control as its primary methods of navigation and configuration. Connect the mouse to the PS/2 port located on the rear panel before powering on the system. Once the system has started up it will recognize the mouse.



Using the mouse

The mouse functions in the same manner as a PC mouse. Use the left and right buttons to open menus and change options.

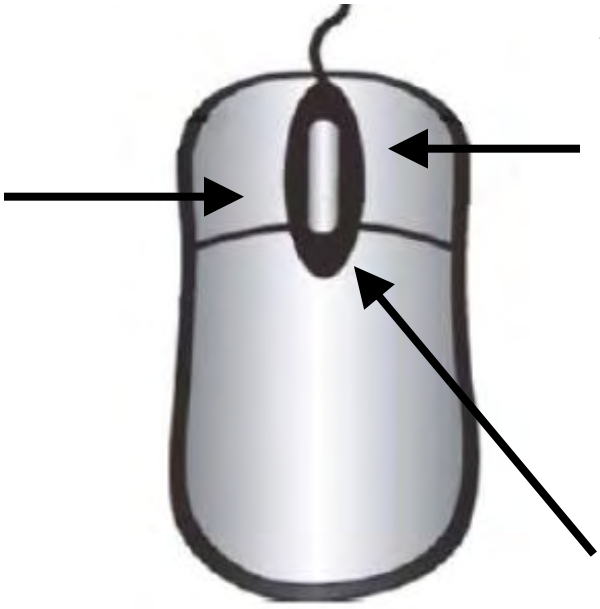
Left Button

Click:

- Select options and change values in menus, Recording mode, and Search mode
- Operate controls in PTZ mode

Double-click:

- Double-click on a channel in Quad or split-screen view to view the channel in full-screen.



Right Button

Right-click:

- Switch between active camera channels in full-screen mode, or switch between groups of channels in Quad or split-screen views
- Motion Setup: Set motion cells
- Digital Information Display (DID): While running, right-click in top-right corner of screen to return to Live Mode

Scroll-Wheel

- In PTZ Mode, Scroll Up to Zoom In, Scroll Down to Zoom Out.
- Changes values in certain menus.



Function Bar

When using the mouse, the Function Bar is the primary on-screen tool for accessing and changing system settings and configurations.

To open the Function Bar:

Mouse:

- Move the cursor over the bottom of the screen.

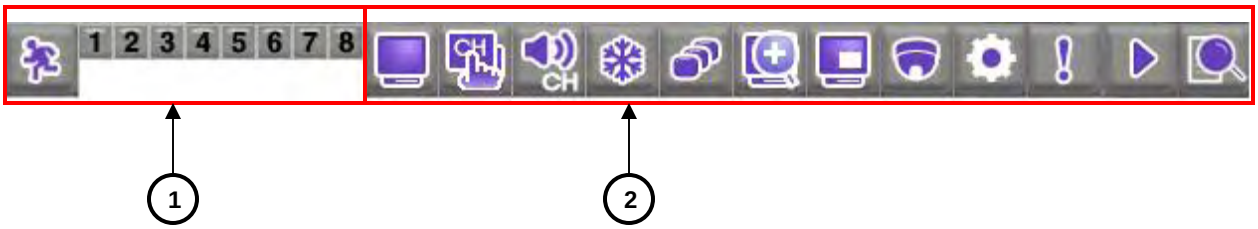
Remote Control:

- Press the 

button.

The Function Bar contains two main components:

1. **Channel Display**
2. **Function Icons**



Channel Display

Click the icon to view the status of each camera in Alarm, Cam-Loss, or Motion.



Alarm: Panic recording. Panic Recording overrides all other active recording modes of the system.



Cam-Loss: The camera has become disconnected or the signal has been lost.



Motion: Recording triggered by motion detection.

Example of camera loss:



The Function Bar shows that cameras 3 and 7 have been disconnected.

Function Icons

Icon	Description
	**DISPLAY**: Switches between Full-Screen, Quad, and split-screen views.
	**CHANNEL**: Click to view any channel in Full-Screen mode.
	**AUDIO**: Select an audio channel from 1~4; click **OFF** to turn off audio**.**
	**FREEZE**: Freezes the image. Press **ESC** to cancel Freeze Mode.
	**SEQUENCE**: Activates Sequence Mode for the connected cameras only. You can set the display view (Full-Screen, Quad, 9-split) prior to activating Sequence Mode.
	**ZOOM**: In Live mode, the image zooms in 2X in Full-Screen view. Click and drag the small blue box in the bottom-right corner of the screen to view other areas of the image or use the Navigation buttons on the Remote Control.
	**PIP**: Activates the Picture-In-Picture (PIP) function. One channel appears in Full-Screen, while another appears in a small inset window. The small screen displays in sequence according to a preset interval.
	**PTZ**: Opens the Pan, Tilt, Zoom (PTZ) Control Panel.  Note: PTZ cameras are not included with this system. *See* Appendix 10 *for more* o **NEAR** Focus near o **FAR** Focus far o **OPEN** Open iris o **CLOSE** Close iris o **SET** Set preset o **GO TO** Go to preset o **AUTO** Auto scan o **PRESET** Enter present number
	**SETTINGS**: Opens the System Control Panel (login: **ADMIN**; leave the password field **blank**). *See* Using the System: Configuration *for more details on changing your password.*
	**PANIC**: In case of emergency, click to start Panic Recording.  Appears on all channels; system records in Continuous mode at highest video quality. Press again to cancel.
	**PLAYBACK**: Click to playback recorded video. Pop-up control panel supports, play, pause, forward/reverse, and next/previous.
	**SEARCH**: Opens the Search menu; scan for recorded video by Date/Time, Event, or Bookmark.

Remote Control

Listed below is a quick reference for the Remote Control.

1. **REC**: Press REC to start Panic recording on the DVR.
   MENU: Press to open the System Main Menu.

2. **DVR 1-6**: Select DVR ID for controlling multiple systems.
3. **Numeric Keypad, – +**: Press number buttons to cycle through individual channels in full-screen mode*; Press – ,+ to cycle through display modes: full-screen, quad, eight.

4. **FUNC**: Opens and closes the Function control bar.
   SEARCH: Opens the search menu.
   ESC: Exits menus, functions; stops playback.
   AUDIO: Switch audio inputs (Ch. 1~4) or mute the internal speaker.
   MODE: Change screen displays: full-screen, Quad and Split-Screen views.

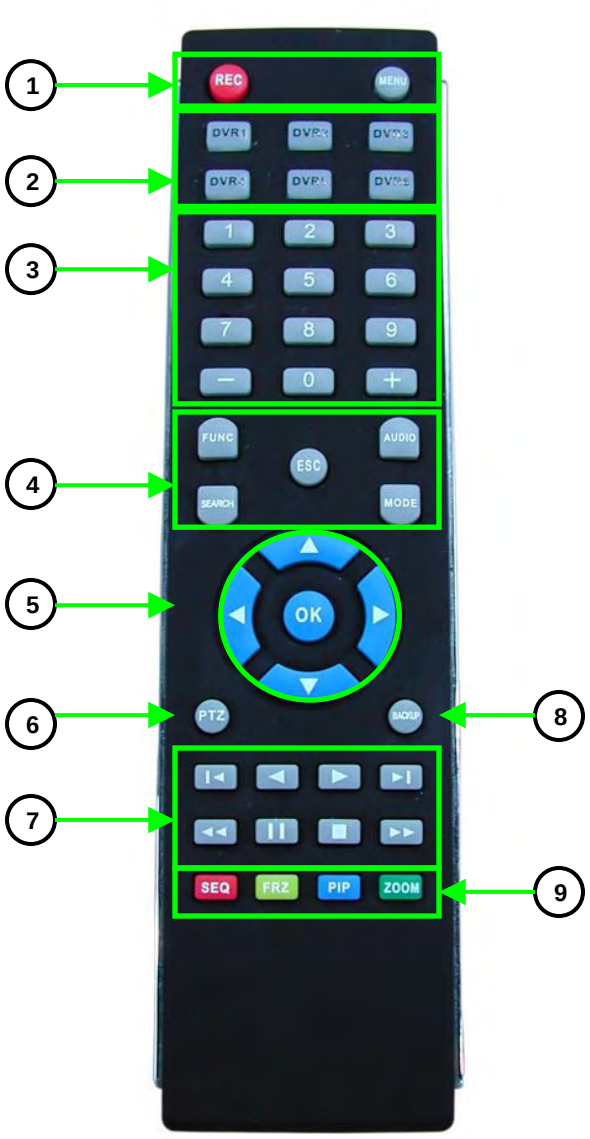
5. **◄▲▼►, OK (Navigation Buttons)**: Cycle through menu options and change values. Operate PTZ functions.

6. **PTZ**: Opens the PTZ menu.

7. **Playback controls:**
   - o ⏮ Jump to start of recording
   - o ◀◀ Slow motion speeds in Forward Playback: 1/4, 1/8, 1/16, and 1/32; Increase playback speed in Reverse Playback: 2X, 4X, 16X, and 32X.
   - o ◀ Reverse Playback
   - o ▶ Forward Playback
   - o ⏸ Pause
   - o ■ Stop
   - o ▶▶ Increase playback speed in Forward Playback: 2X, 4X, 16X, and 32X; Slow motion speeds in Reverse Playback: 1/4, 1/8, 1/16, and 1/32.
   - o ⏭ Jump to end of recording.

8. **BACKUP**: Opens the USB Backup menu.

9. **SEQ, FRZ, PIP, ZOOM**:
   - o **SEQ** Automatically cycle channels in sequence. Select full-screen, Quad, or Eight-view prior to pressing SEQ.
   - o **FRZ** In full-screen mode, freeze image; press Esc to cancel. In Quad and Eight-view, activate freeze features, then press corresponding numeric button to freeze the image; press Esc to cancel.
   - o **PIP** Turn on picture-in-picture view.
   - o **ZOOM** Activate full-screen zoom mode. Use navigation arrows to scan image; press ESC to cancel.



*L19WD1600 series only: 0+0 = 10, 0+1 = 11, etc.

Menu Navigation Control & Tips



Using the Navigation Icons

Use the Navigation Icons when navigating the system menus.

- **HOME**: Click  while in any menu to return to the System Main Menu.
- **BACK**: Click  to return to the previous menu.
- **EXIT**: Click  to exit menus.

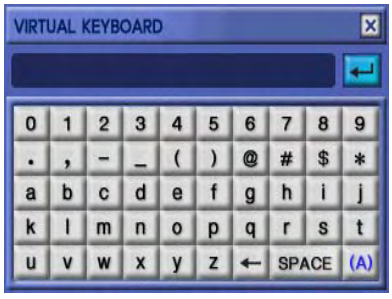




Using the Navigation Buttons

When using the remote control, the Navigation Buttons are the primary way to move through the system menus.

- ◄► Press the Left and Right arrow buttons to choose different options in menus.
- ▲▼ Press the Up and Down arrow buttons to change values within options. These buttons can also choose different menu options in certain menus.
- **OK** Press the  button to change option values and confirm selections.
- **MENU** Press the  button to open the System Main Menu; you must first login with your user name and password.
- **REC** In an emergency, press the  button to start Panic Recording; press again to cancel.
- **ESC** Press the  button to close windows and menus.

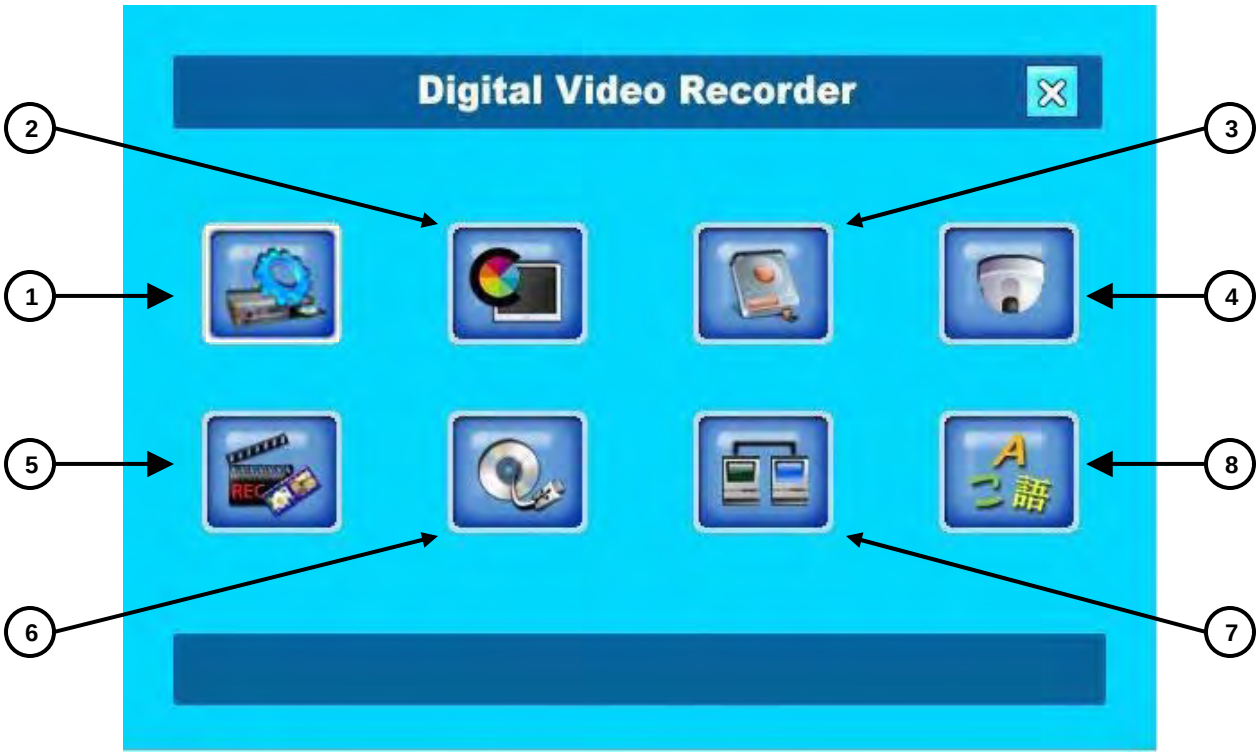


Using the Virtual Keyboard

You need to use the Virtual Keyboard to change user passwords and to edit camera names.

1. Click  to delete the default password or camera title.
2. Enter a new password or camera title using the alpha-numeric keypad. Press  to change case.
3. Press  to save changes and close the Virtual

System Main Menu



1. **CONFIGURATION**
2. **DISPLAY**
3. **HDD MANAGEMENT**
4. **CAMERA**
5. **RECORD**
6. **BACKUP/UPGRADE**
7. **NETWORK**
8. **LANGUAGE**

To open the System Main Menu:

Mouse:

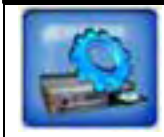
- From the Function Bar, click  .

Remote Control:

- Press the  button.

Note: You must login to the system before you can access the System Main Menu.

System Control Panel Icons

Icon	Description
	**CONFIGURATION**: Set Date/Time, Passwords, User Authority, Audio, System Information, and restore factory defaults.
	**DISPLAY**: Change display settings, adjust resolution, and enable DID Mode (Digital Information Display).
	**HDD MANAGEMENT**: Format hard disk and enable/disable disk overwrite.
	**CAMERA**: Change Camera Title, adjust color, camera settings, alarm, motion, and PTZ settings, and set Event pop-up.
	**RECORD**: Configure Record Setup, Schedule, and Holiday settings.
	**BACKUP/UPGRADE**: Backup data to USB storage device; upgrade firmware.
	**NETWORK**: Adjust IP settings and connections, and enable/disable DDNS.
	**LANGUAGE**: Change the system language to English, French, or Spanish.

Starting the System

Once you have made all connections to the system and powered it on, you must login to the system and set the date and time.

Note: By default, the primary user of the system is the *ADMIN* (administrator). The ADMIN has full access and authority to the system.



ATTENTION: When first logging in to the system, keep **ADMIN** as your user name and leave the password field **blank**. *See* Using the System: Configuration *for more details on changing your password.*

To log into the system:

Mouse:

1. Move the cursor toward the bottom of the screen to open the Function Bar.

   From the Function Bar, click  .

   Select your **user name** and **password** and click **OK**.

Remote Control:

1. Press the  button.

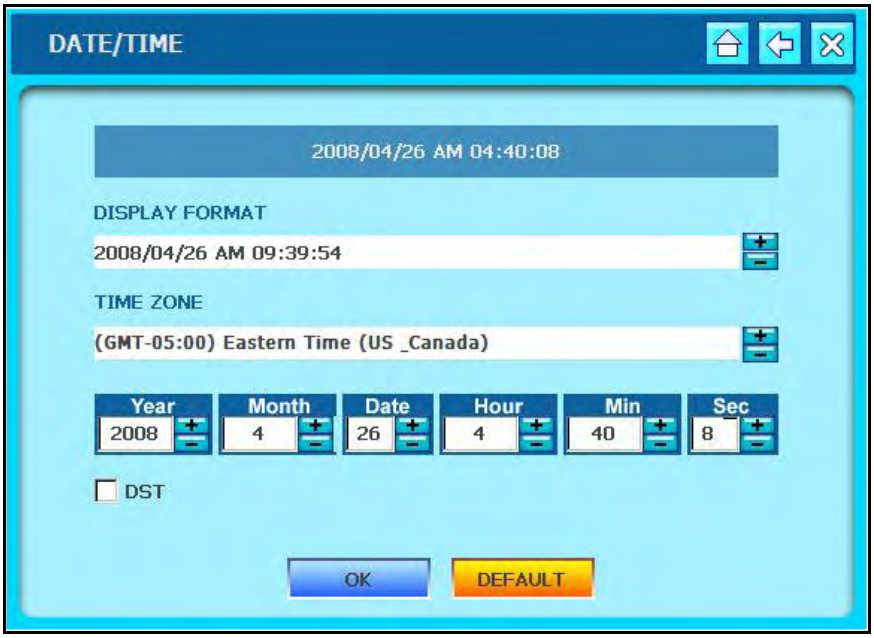
   Use the Navigation Buttons and Numeric Keypad to select your **username** and **password**.

   Select **OK**.

Note: You must login when accessing the following critical menus:

- Search
- PTZ
- HDD Clear
- Backup

Setting the Date and Time



ATTENTION: You must set the date and time prior to setting a recording schedule on the system. *See* Using the System: Record *for more details on setting a recording schedule.*

To set the date and time:

Mouse:

1. From the System Main Menu, click  .
2. From the Configuration menu click **DATE/TIME**.
3. Click **+/-** to change the **DISPLAY FORMAT**, **TIME ZONE** and **Date** and **Time** for the system. Check the **DST** box to enable Daylight Savings Time.
4. Click **OK** to save your settings or click **DEFAULT** to restore factory defaults.
5. Click  to exit.

Remote control:

1. Press the  button and login to the system.
2. Using the Navigation Buttons, select  then select **DATE/TIME**. Use ◄► to cycle between menu options. Use ▲▼ to change individual settings.
3. Select the **DISPLAY FORMAT**, **TIME ZONE** and **Date** and **Time** for the system.
4. Check the **DST** box to set Daylight Savings Time.
5. Select **OK** to save your settings or select **DEFAULT** to restore factory defaults.
6. Press the  button to exit.

Time Stamp

When you change the date and time after recording video data. A pop-up window appears informing you that the recorded video before the time change will keep the original time stamp.

The same applies for changes to Daylight Savings Time (DST).



Turning the monitor off (Screen Saver)

- From the front panel, press and hold the **MENU** button for three seconds.





- The system continues to record while the monitor is shut off. LED lights remain lit on the front panel. This is useful to disguise the fact that the system is a security monitor.
- Press the MENU button again to turn the monitor back on.

Note: Only pressing the MENU button will turn the monitor back on.



Turning the monitor off (cont'd.)

The monitor can also be set into Screen Saver mode:



1. From the System Control Panel click  and then click **VGA**.
2. Under Screen Saver, select **ON**.
3. Enter the **SCREEN OFF** time and **SCREEN ON** time. The system uses the 24-hour clock.
4. Click **OK** to save your settings or click **DEFAULT** to restore factory defaults.

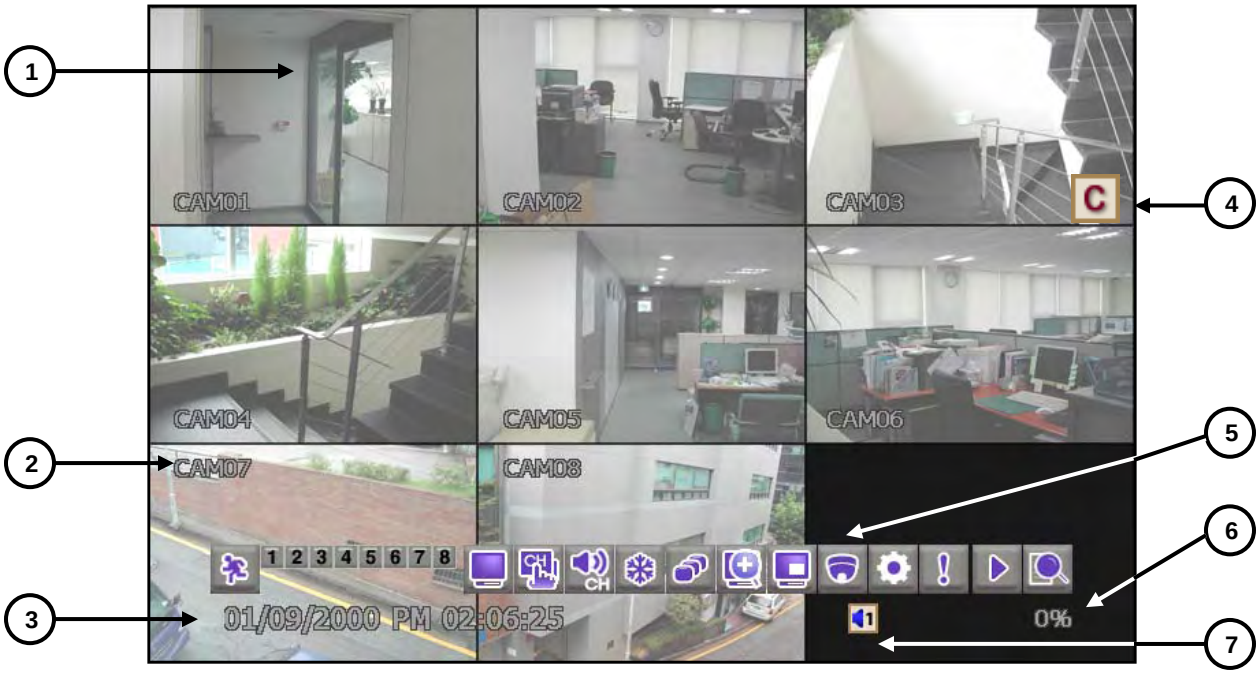
Note: For details setting the Screen Saver (automatically turning the monitor on/off), see page 39.

Display Modes

The system features the following modes:

- Live Mode
- Full-Screen, Quad, & Split-Screen views
- Playback Mode
- Search Mode

Live Mode



1. **Live**: Displays the Live view of each camera. Available in Full-Screen, Quad, and Split-Screen views.
2. **Camera Title**: Displays the name of each camera by channel. You can change the name of each camera channel in the Camera menu of the System Control Panel.
3. **Date/Time**: Shows the date/time, network status, active audio channel and used hard disk space.
4. **Recording Mode**: The system uses the following icons to indicate its recording status:

- A **Alarm**
- M **Motion**
- C **Continuous**
- ! **Panic**

5. **Function Bar**: Fast, mouse-driven access to the many functions of the System.
6. **Hard drive space**: Shows the percentage of used hard drive space.
7. **Audio**: Shows the active audio channels or the mute internal speaker.

Full-Screen, Quad, & Split Views

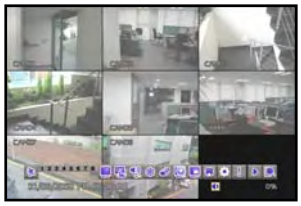
The L19WD Series has several display views available: Full-Screen, Quad-View, and Split-Screen Views. You can easily change the display view through the system's three input methods: mouse, remote control, and front panel.



Full-Screen View



Quad View



8-Split View

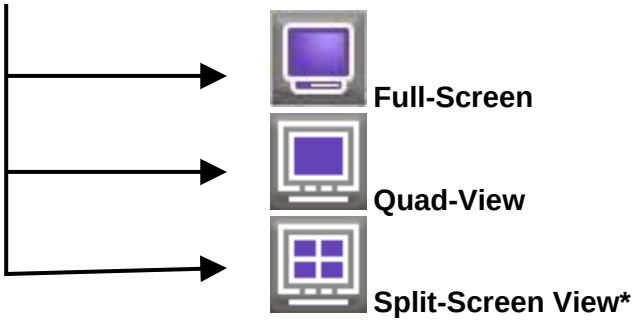


16-Split View*

To change display views:

Mouse:

- From the function bar, click  :



Remote Control:

- Press the **MODE** button to cycle through the display modes.



Front Panel:

- Press the **MODE** button to cycle through the display modes.



*16-split screen view only available on L19WD1600 Series.



Playback

View recorded video on the system through Playback mode.

To open Playback mode:

Mouse:

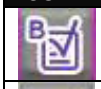
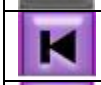
1. While in Live Mode, move the cursor over the bottom of the screen.
2. Click  and login with your **username** and **password**.

Remote Control:

1. Press the ▶ button.
2. Enter your **username** and **password** and select **OK**.

Playback Bar Icons



Icon	Description
	**BOOKMARK**: Click to bookmark a point in playback for future reference.
	**DISPLAY**: Switch between Full-Screen, Quad, and Split views.
	**DISPLAY CHANNEL**: Select to view any channel in Full-Screen mode.
	**AUDIO CHANNEL**: Select audio channels 1 or 2*; click OFF to turn off audio.
	**SEARCH**: Open the Search Menu to view playback recorded video.
	**BACK**: Move to the start of all recorded video.
	**REVERSE PLAYBACK**: View playback in reverse.
	**PAUSE**: Pause playback.
	**PLAY**: Start playback.
	**END**: Move playback to the end and stop.
	**SLOW MOTION PLAY**: Slow motion speeds in Forward Playback: 1/4, 1/8, 1/16, and 1/32; Increase playback speed in Reverse Playback: 2X, 4X, 16X, and 32X.
	**FAST FORWARD**: Increase playback speed in Forward Playback: 2X, 4X, 16X, and 32X; Slow motion speeds in Forward Playback: 1/4, 1/8, 1/16, and 1/32.
	**EXIT**: Quit Playback Mode.

*Audio configuration varies by model.



Search Mode

Search the system for recorded video by date / time, event, and bookmarks.

To open the Search Menu:

Mouse:

1. From the Function Bar, click  .
2. Enter your **username** and **password** and click **OK**.

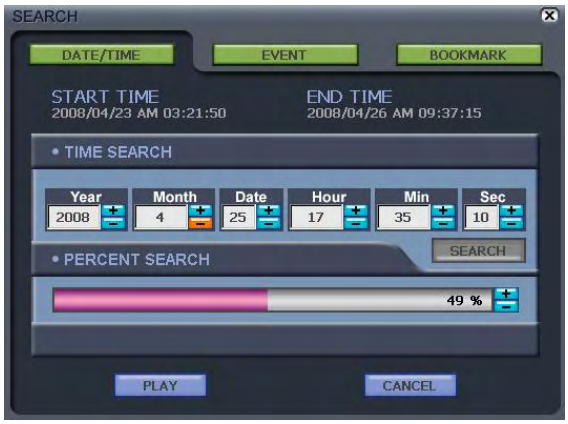
Remote Control:

1. Press the  button.
2. Use the navigation buttons to enter your **username** and **password** and select **OK**.

DATE/TIME

Search for recorded video data according to date and time.

Note: START TIME and END TIME in the DATE/TIME menu shows the start and end of recording. They cannot be edited.



- **TIME SEARCH**: Click **+/-** to enter the Date and Time and click **Search**.
- **PERCENT SEARCH**: Click **+/-** or click anywhere in the **progress bar** to search a certain portion of the recording time.

EVENT

Search for recorded video data according to Events. Events include Motion, Alarms, and Video Loss from any of the cameras.



- Click ▲▼ to scroll through the event list.



Click to view the previous hundred events.



Click to view the previous ten events.



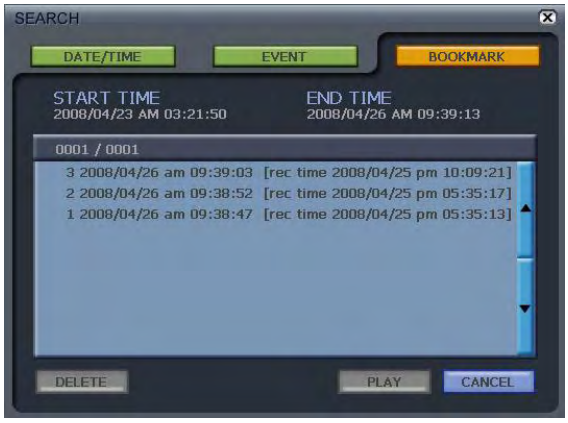
Click to view the next hundred events.



Click to view the next ten events.

BOOKMARK

Search for recorded video data according to Bookmarks.



To search video data by bookmark:

1. Open the Search menu and click **BOOKMARK**.
2. Click one of the bookmarks from the list and click **PLAY**. If you have many bookmarks, click ▲▼ to scroll through the bookmark list.

Setting Bookmarks

You can set bookmarks in recorded video data to mark unique moments of activity or interest for future reference.



To set bookmarks:

1. Search for recorded video by either **DATE/TIME** or **EVENT**. The Playback Control Bar appears during playback.
2. From the Playback Control Bar, click  . A dialogue window informs you to wait and then playback resumes.

Note: The system can save a maximum of 1000 bookmarks.

To delete bookmarks:

1. Open the Search menu and click **BOOKMARK**.
2. Select a bookmark and then click **DELETE**.

Note: You can only delete one bookmark at a time.

Using the System



You can now begin to explore the main menu of your system.

Configuration

Open the Configuration menu from the System Control Panel to adjust various system settings.

BUZZER

Select the boxes to turn system beep, alarms, and buzzer sounds on/off.



- **KEY BEEP**: Beeps when you click the mouse or press buttons on the remote control.
- **VIDEO LOSS**: Alarm sound when video signal is lost from a camera.
- **ALARM IN**: Alarm sound for connected external security alarm.
- **MOTION DETECT**: Alarm sound whenever motion is detected.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

PASSWORD SETUP

Set passwords for the various users of the system. Only the ADMIN can change passwords for users on the system.



To change your password:

1. Click ◄► to select the **USER.** The Virtual Keyboard opens.
2. Select USER PASSWORD, and use the Virtual Keyboard to enter the current **password** for that user.
3. Under NEW PASSWORD, enter a **new password** for the selected user.
4. Re-enter the **new password** to confirm and click **OK**.

See Using the Virtual Keyboard for more details on using the Virtual Keyboard.

Note: The password has a maximum length of ten digits.

The system has a total of ten users:

User	Default Password
ADMIN	[leave blank]
MANAGER1	1
MANAGER2	2
MANAGER3	3
USER1	1
USER2	2
USER3	3
USER4	4
USER5	5
USER6	6

You can log in to the system using any of these default users, though only ADMIN has full access to all functions of the system.

Note: Gray, non-selectable menu options mean the logged-in user does not have authority to access those options.

Note: The number of connected users can affect network performance. No more than 4~5 users should be logged-in to the system at the same time. Please keep in mind your bandwidth restrictions and LAN settings if allowing multiple users to access the system at once.

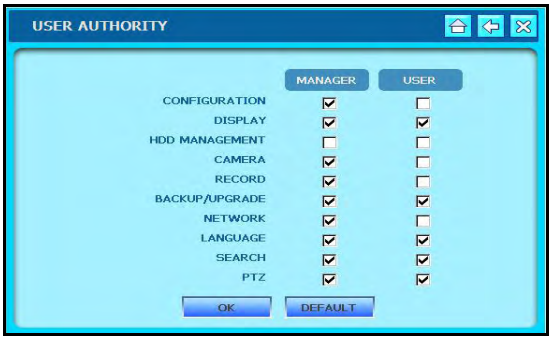
Resetting Passwords

If you forget a user password or the administrator password, please contact Technical Support.

USER AUTHORITY

If many people will be operating the system, the system administrator (ADMIN) can set restrictions on which system options users can access.

Note: By default, ADMIN has access to all system options.



Select the boxes to limit access to system options for different users:

- **CONFIGURATION**: Change various system settings including date & time and passwords.
- **DISPLAY**: Change graphic displays on the main System Screen and Playback Screen.
- **HDD MANAGEMENT**: Format the hard disk and set disk Overwrite On/Off.
- **CAMERA**: Rename camera channels, adjust color and brightness, and adjust settings for motion sensitivity.
- **RECORD**: Adjust record settings, along with recording schedule.
- **BACKUP/UPGRADE**: Backup data to an external device via USB or update the system's firmware.
- **NETWORK**: Change network IP settings, Web Server, and enable DDNS for remote viewing of the system.
- **LANGUAGE**: Change the system language to English, Spanish, or French.
- **SEARCH**: Search the system for recorded data. Search by date & time, events, and bookmarks.
- **PTZ**: Change settings for PTZ cameras (not included).

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults. For more details, see Appendix L.

RS-232C

Adjust settings for an external communication device.

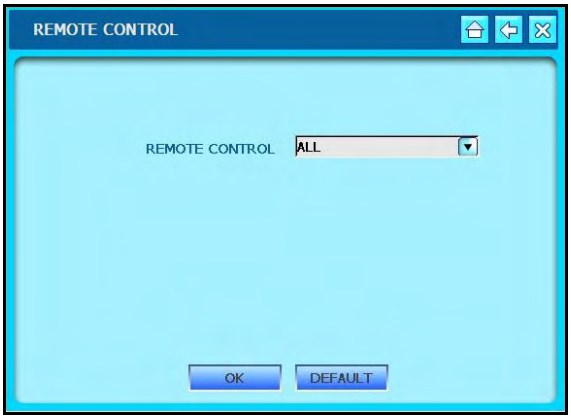


- **BAUDRATE**: Transmission speed between the system and the device.
- **LENGTH**: The length of the transmission signal.
- **STOP BIT**: Bit that indicates that a piece of information has just been transmitted.
- **PARITY**: Can help detect errors in transmission.
- **FLOW CONTROL**: Assign control of signal transmission to hardware or software.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

REMOTE CONTROL

Set the remote control up to six units of the L19WD series.



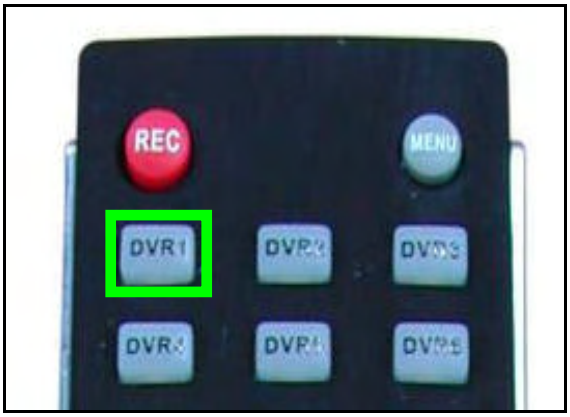
To assign remote control functionality:

1. From the Remote Control drop-down menu, select **ALL** to control up to six systems simultaneously.

OR

1. Select **1-6** to assign a specific L19WD series unit to the remote control.
2. Press the corresponding button on the remote control (**DVR1** – **DVR6**) to control only that specific system.

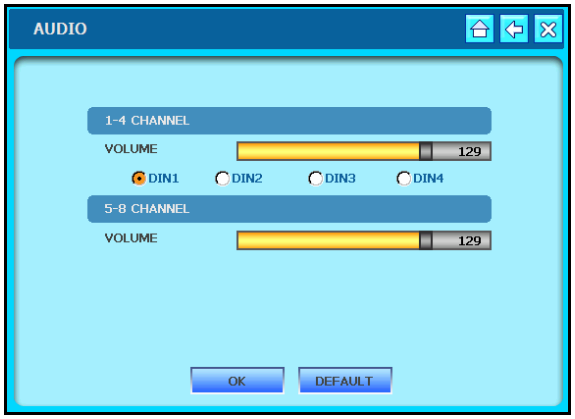
Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.



Note: If you select 01 in the Remote Control settings, you must press DVR1 on the remote control to operate the system.

AUDIO*

Set volume levels for the two audio inputs of the system.



To change audio settings:

Mouse:

1. Drag the bar left/right to adjust the volume.
2. Select the radio button to assign audio recording to *one* of the four 6-pin DIN cameras. DIN cameras can only be connected in channels 1~4.†

Remote Control:

1. Press ◄► to select an audio channel, and then press ▲▼ to adjust the volume.
2. Press ◄► to select the buttons, then press **OK** to check.

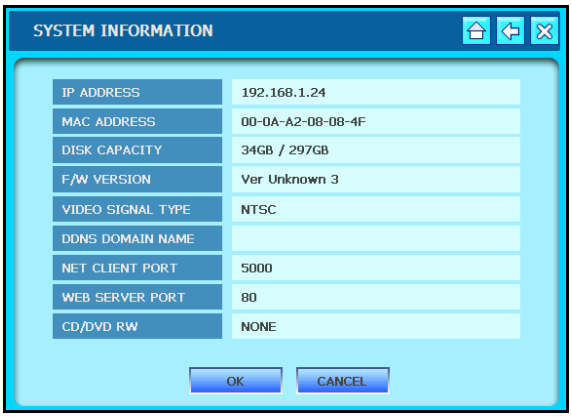
Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

ATTENTION: You can only record *two* channels of audio on the system**: one audio-capable BNC camera or one DIN camera records audio for channels 1~4; one audio-capable BNC camera records audio for channels 5~8. You *cannot* have a DIN camera and an audio-capable BNC camera recording audio at the same time on channels 1~4.

*Audio capable cameras may not be included with your system.
**Four audio channels on the L19WD1600.
† Audio control for DIN cameras only available on L19WD800.

SYSTEM INFORMATION

View important system information:



- **IP Address**: The IP address of the system when on a network.
- **MAC Address**: MAC address of the system. Necessary for networking or setting up remote viewing.
- **Disk Capacity**: Displays the total size of the system hard disk and amount presently in use.
- **F/W Version**: Firmware version.
- **Video Signal Type**: Video format of the system: either NTSC in North America or PAL in Europe.
- **DDNS Domain Name**: Domain name used with the Lorex Client Software to let you view your system remotely over the Internet from another PC.
- **Net Client Port**: The port that allows your system to communicate to other PCs or devices over a network. By default, the Net Client port is 5000.
- **Web Server Port**: The Web Server port (by default, 80) to let external PCs or devices communicate with your system over the Internet.

FACTORY DEFAULT

Reset factory defaults on System, Channel Data, PTZ, Network, or Record data.

Note: Resetting factory defaults will not erase recorded data from your hard disk.



To reset factory defaults:

- Select the box, **SELECT ALL**, to reset all settings

OR

- Select the individual boxes for **SYSTEM**, **CHANNEL**, **PTZ**, **NETWORK**, and **RECORD** settings.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

Note: Network is excluded from SELECT ALL. To reset your network settings to factory defaults, select the Network box individually.

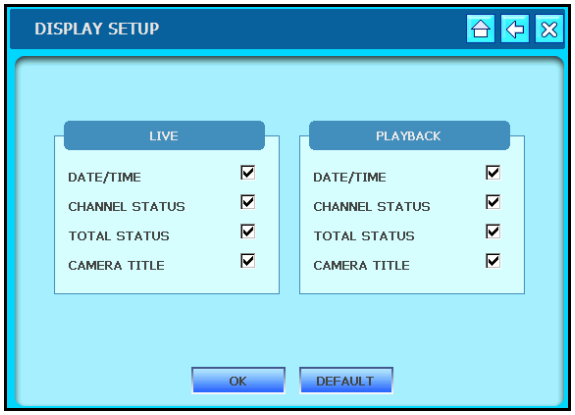


Display

Open the Display menu from the System Control Panel to set graphical displays during Live view and Playback, and edit settings for the Digital Information Display (DID).

DISPLAY SETUP

Select the boxes to turn graphical displays in Live mode and Playback on/off.



- **DATE/TIME**: Shows the date and time in the lower left corner.
- **CHANNEL STATUS**: The active status for each of the cameras: Continuous, Motion, Alarm, or Panic.
- **TOTAL STATUS**: Show the percentage of the hard drive currently in use. Also shows the active Audio Channel.
- **CAMERA TITLE**: Display the name of the camera channels.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

INTERVAL

Set the time intervals for Sequence Mode (SEQ), Picture-In-Picture (PIP), and Spot Monitor. You can also set the timeout for the on-screen menu. A short timeout means any on-screen menus will disappear quickly without user input; a longer timeout means menus will remain on-screen longer.



To change time intervals:

Mouse:

1. Click ◄► to adjust the time interval (in seconds) for **SEQ**, **PIP**, and **Spot Monitor**.
2. Under TIMEOUT, click the drop-down menu to adjust the timeout of the on-screen menu.

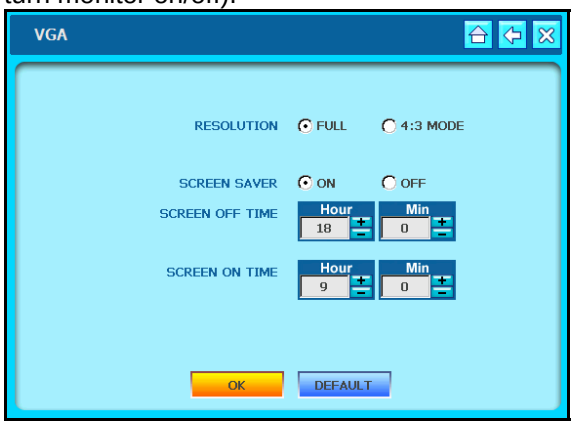
Remote Control:

1. Press ◄►to select between **SEQ**, **PIP**, and **Spot Monitor**, then press ▲▼to change the time increment.
2. Press ◄►to select the **drop-down menu**, and then press **OK** to select a time interval for the menu timeout.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

VGA

Set the system's screen resolution and adjust the settings for the Screen Saver (automatically turn monitor on/off).



- **RESOLUTION**: Select 16:9 widescreen or 4:3 full screen.
- **SCREEN SAVER**: Select to turn the monitor on or off. If *On*, you must select an Off Time and On Time for the Screen Saver.

  Note: The Screen Saver feature can be useful if you need to disguise the fact that your system is a security monitor.

- **SCREEN OFF**: Click  to set the time (in 24 HRs) that the monitor will automatically turn off. For example, if you want the monitor to automatically turn off at 11 PM, enter 23:00.

- **SCREEN ON**: Click  to set the time (in 24 HRs) that the monitor will automatically turn on. For example, if you want the monitor to automatically turn on at 6 AM, enter 6:00.

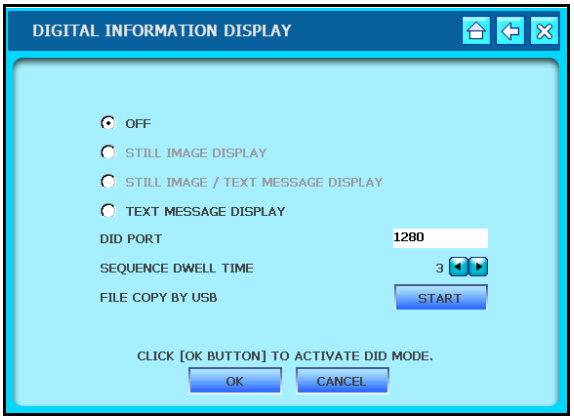
  Note: The system continues to record while the monitor is turned off.

Click **OK** to save your settings, or click **DEFAULT** to restore factory settings.

Note: When the monitor is turned off, press and hold the MENU button on the front panel to turn the monitor on. *Only* the MENU button can turn the monitor back on.

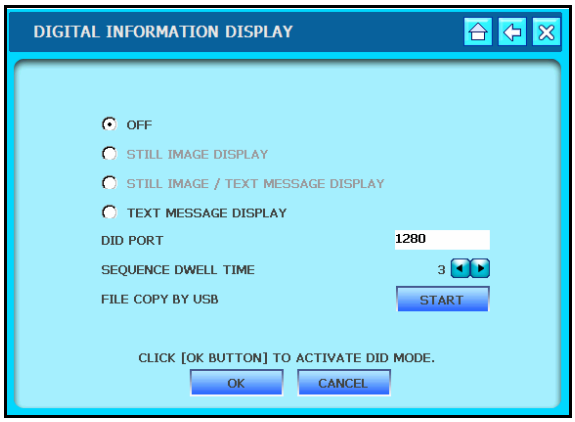
DIGITAL INFORMATION DISPLAY (DID)

Use Lorex Message Master (included on the Software CD) to send text and digital images (JPEG) to the system. Use the text and still images for announcements, advertising, or other retail purposes.



- **STILL IMAGE DISPLAY**: Display a slide show of still images (JPEG)
- **STILL IMAGE/TEXT MESSAGE DISPLAY**: Display both a still image slide show and text
- **TEXT MESSAGE DISPLAY**: Display still or moving text at the bottom of the screen.
- **DID PORT**: By default, **1280** is the fixed port for the system to communicate with Lorex Message Master. You set the port to whichever port you want using the Virtual Keyboard.
- **SEQUENCE DWELL TIME**: Set the length of time (in seconds) that the digital images remain on screen.
- **FILE COPY BY USB**: Copy JPG files from a USB to the system to use in the DID slide show.

DIGITAL INFORMATION DISPLAY (cont'd)



To copy files from a USB flash drive:

1. Connect an empty USB flash drive to your computer and create a new folder on the drive. Give it any name, such as PICTURES.
2. Copy JPG files (up to 1.2MB) to the folder.

   Note: If the JPG files are larger than 1.2MB, use Lorex Message Master to convert the files to a smaller size. For more details, see page 83.
3. Eject the USB drive from your computer and connect it to the USB port on the front panel of the system.
4. Open the System Main Menu (login required).
5. From the System Main Menu, click  and then click **DIGITAL INFORMATION DISPLAY**.
6. Under File Copy by USB, click **START**. Click **OK** in the next window. File copy may take a few moments depending on the number of files on the USB flash drive.

To start the image/text message display:

1. Select the radio buttons for **STILL IMAGE**, **TEXT MESSAGE DISPLAY** or **STILL IMAGE/TEXTMESSAGE DISPLAY**.
2. Click **OK**. The slide show/text display starts.
3. To exit the slide show, click  in the top-right corner of the screen, or press and hold the **EXIT button** on the front panel for 3 seconds.
4. Login with your **username** and **password** to return Live Mode.

Recommended image resolution for JPEG files:

NTSC

720x480 / 1440x960

PAL

720x576 / 1440x1152

Lorex Message Master (included on the software CD) allows you to edit text and convert images instantly. For details on using Lorex Message Master, see page 93.



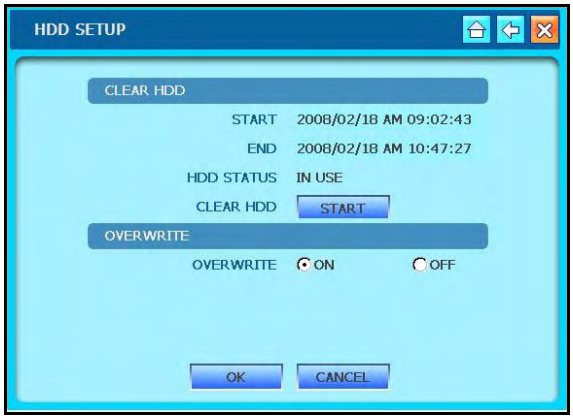
HDD Management

Format the hard disk, view HDD info, and set disk Overwrite on and off.

HDD SETUP

Use Clear HDD to format the hard disk. This erases all recorded video data from the hard disk. By default, the system comes with a pre-formatted hard disk.

ATTENTION: Only format the hard disk if absolutely necessary. All the recorded data on your hard drive will be lost. You cannot undo this step.



To format the hard disk:

1. Under CLEAR HDD, click **START**. Login screen pops-up.
2. Enter your **username** and **password** and click **OK**.
   Screen icons turn grey as system clears the hard disk.
3. Click **OK**.

Note: Clearing the hard disk will not delete your system settings.

OVERWRITE

Overwrite determines how data is maintained when the hard disk is full.

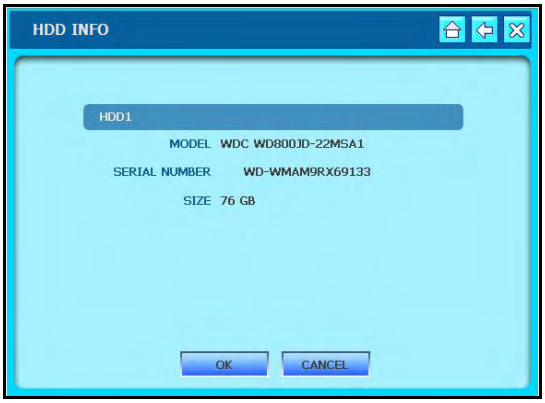
With Overwrite turned on, data is overwritten once the hard disk is full, starting with the oldest recording.

If Overwrite is turned off, the system stops recording once the hard disk is full; recording stops and the Buzzer activates. The Overwrite Icon appears in place of the hard drive percentage icon. 

Note: Use the hard drive percentage icon in the bottom-right corner of the screen to keep track of the space remaining on your system's hard disk.

HDD INFO

Click HDD Info to see the Model Number, Serial Number, and Size of your system's hard disk.





Camera

Rename camera channels, adjust color, set motion sensitivity, and configure PTZ cameras (not included).

CAMERA TITLE

Use the Virtual Keyboard to rename individual camera channels.



To change the camera title:

Mouse:

1. Click the **text field** to select one of the cameras. Click ◄► to switch between groups of cameras.
2. From the Virtual Keyboard, click  to erase the default camera name.
3. Enter a new name for the camera channel and click  .

Remote Control:

1. Press ◄► to switch between Cameras and press OK to select.

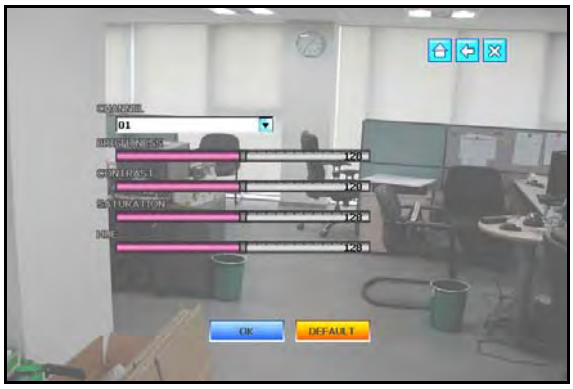
Select  to delete the default camera name.

Enter a new for the camera channel and select  .

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

COLOR ADJUSTMENT

Use the sliders to adjust Brightness, Contrast, Saturation, and Hue for each camera.



To adjust camera color:

Mouse:

1. Click the drop-down menu to select the camera.
2. Click and the hold the slider bar to increase and decrease BRIGHTNESS, CONTRAST, SATURATION, and HUE. The active slider bar turns green.

Remote Control:

1. Press ◄► to select the **drop-down menu** and press ▲▼ to select a camera.
2. Press ◄► to select a **slider bar** and press ▲▼ to increase or decrease. The active slider bar turns green.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

CAMERA SETUP

View the type of cameras (NTSC/PAL) or if there is no camera connected (icon of a grey camera).

Disable Record if you want to use a camera only for observation.

Covert turns the onscreen display of the camera ON/OFF. Covert cameras continue to record, though the image is not displayed onscreen. Use this feature if the Monitor is located in a public area and a camera should not be displayed (e.g. a camera in a cash-count room or above a cash register).



To set Covert and Record:

Mouse:

1. Check the boxes in the Covert or Record columns to enable these functions on cameras 1-4.
2. Click ◄► at the bottom of the window to cycle between groups of cameras.

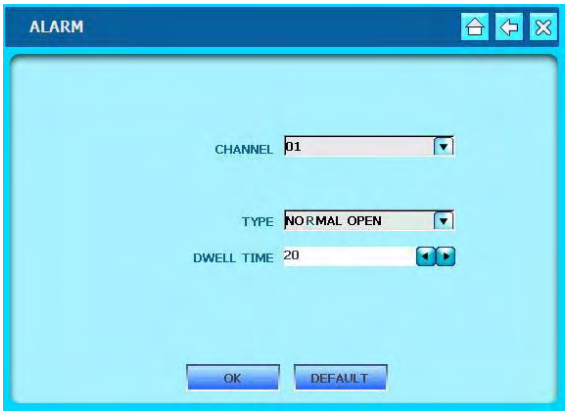
Remote Control:

1. Press ◄► to select boxes in the Covert and Record columns.
2. Press **OK** to check the box.
3. Press ◄► to select the arrows at the bottom of the screen and press **OK** to cycle between groups of cameras.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

ALARM

Configure settings for an external Alarm Sensor.



To configure Alarm settings:

Mouse:

1. Under CHANNEL, click the drop-down menu to select a channel to display the Alarm notification.
2. Under TYPE, click the drop-down menu to select either **NORMAL OPEN**, **NORMAL CLOSED**, or **OFF**.
3. Click ◄► to set the **DWELL TIME** (in seconds) for the alarm notification. The higher the dwell time, the longer the alarm notification remains on the selected alarm channel.

Remote Control:

1. Press ◄► to select the CHANNEL drop-down menu and press ▲▼ to select a specific channel for alarm notification.
2. Press ◄► to select the Type drop-down menu and press ▲▼ to select either **NORMAL-OPEN**, **NORMAL-CLOSED**, or **OFF**.
3. Press ◄► to select the **DWELL TIME text field** and press ▲▼ to increase or decrease the Dwell Time.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

MOTION

Set the Motion Sensitivity for each camera channel.

Use Motion Cell Setup to apply motion detection to only a certain area of the image. For example, if you want to closely monitor a door, you can apply motion sensing to only the area of the door, not the whole image.

Note: In the Motion Menu, all images from connected cameras will *turn green* as they detect movement. Use this feature to help you with Motion Cell Setup.



To configure Motion Setup:

Mouse:

1. Under MOTION SEUP, click the **CHANNEL drop-down menu** to select the channel you want to configure.

Click the Sensitivity drop-down menu to select either Low, Medium, High, or Very High.

Click the **DWELL TIME arrows** to increase or decrease the **DWELL TIME**. The higher the Dwell Time, the longer the channel with motion detection remains in Full-Screen view.

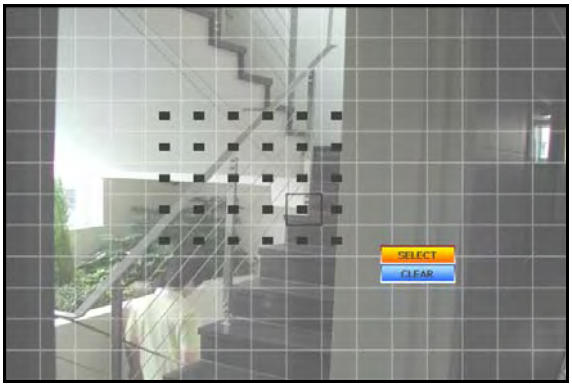
Remote Control:

1. Press ◄► to select the Channel drop-down menu and press ▲▼ to select an individual channel.

Press ◄► to select the Sensitivity drop-down menu and press ▲▼ to select Low, Medium, High, or Very High.

Press ◄► to select the **DWELL TIME text field** and press ▲▼ to increase or decrease the Dwell Time.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.



To configure Motion Cell Setup:

Mouse:

1. Right-click on the screen to open **Motion Cell grid.**
2. Click and drag across the screen to set a specific motion sensitive area.
3. Click **SELECT** to enable the motion sensitivity to the selected cells. Cells are clear.
4. Click **CLEAR** to disable the area of motion sensitivity. Cells turn solid grey.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

Note: By default, motion detection is enabled on the entire image of each connected camera. To verify that motion is active, move your hand in front of the camera – the active cells turn green.

For more details on Motion Cell Setup, see Appendix C.

PTZ

Configure settings for PTZ cameras (not included).



- **CHANNEL**: The channel for the connect PTZ camera
- **PROTOCOL**: The model of PTZ camera
- **ID**: Identification value for the PTZ camera
- **BAUDRATE**: Set the transmission rate for the PTZ camera
- **PAN**: Horizontal movement speed
- **TILT**: Vertical movement speed
- **ZOOM**: Zoom In/Out speed
- **FOCUS**: Focus Near/Far speed

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

EVENT POPUP

Set notifications for motion or alarm events.



- **CHANNEL**: Select the channel for the Event popup
- **POPUP**: Turn popup On/Off
- **EVENT**: Select either Motion or Alarm events
- **DWELL TIME**: Set the Dwell Time for the event popup. The higher the dwell time, the longer the Event popup remains in full-screen view

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

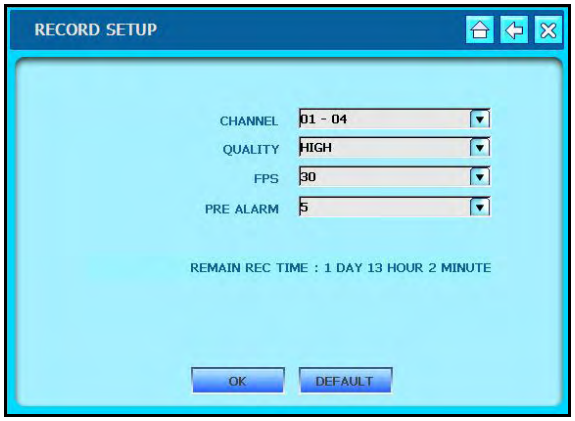


Record

Configure Record settings and set recording and holiday schedules.

RECORD SETUP

Configure Record settings, including image quality, frames-per-second, and pre-alarm recording.



Use the drop-down menus to change the following settings:

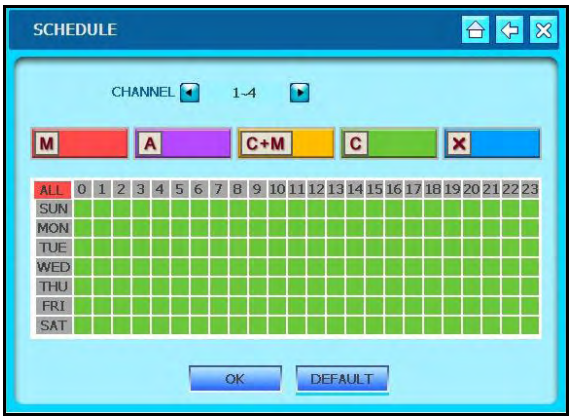
- **CHANNEL**: Select the group of channels to apply settings.
- **QUALITY**: Set the quality of recording: Normal, High, and Highest.
- **FPS**: Set the Frames Per Second for the group of channels from 3, 5, 10, 15, and 30 fps (real-time video capture).
- **PRE ALARM**: When an alarm is detected, the Pre Alarm begins recording from before the alarm was detected (retrieved from video cache). Set the Pre Alarm time from 1-5 seconds, or turn it Off.

Note: The Record Setup window displays the record time remaining based on your selected settings and hard drive capacity.

Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.

SCHEDULE

Set scheduled recording cameras for groups of cameras. Apply any of the five recording modes by day and hour.





Motion: System *only* records if motion is detected in the selected time interval.



Alarm: System records *only* when an alarm is triggered.



C+M: System records continuously and still keeps a log of motion events.



Continuous: System constantly records from the camera.



No Recording: System does not record any video data based on blocked intervals in the schedule.

ALL: First click a recording mode, then click **ALL** to apply the selected recording mode to the entire schedule.

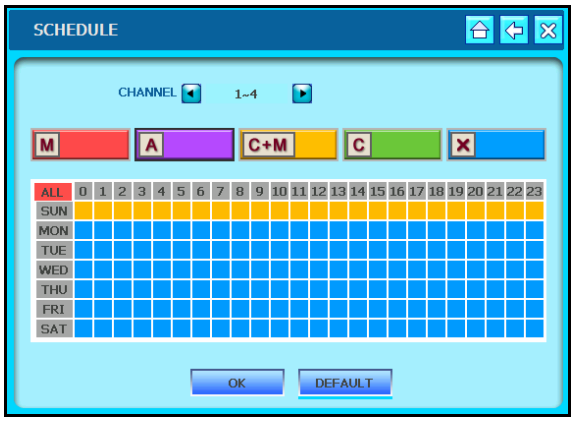
Schedule (cont'd)

To set a recording schedule:

Mouse:

1. Click the ◄► to select a group of channels (number varies depending on your system).
2. Click one of the **five recording modes** (M, A, C+M, C, X).

Click one of the **tiles in the table according to the day and hour(s)** you want to apply the record mode. For example, if you wanted Alarm recording from midnight to 6 AM, Monday-Friday:



Click  .

Click and drag across the table from tile **"MON-0"** to tile **"FRI-5."** The selected area turns purple to indicate Alarm recording is enabled from 12 AM to 6 AM, Monday-Friday.

Repeat steps i-ii for whichever recording mode you want to schedule.

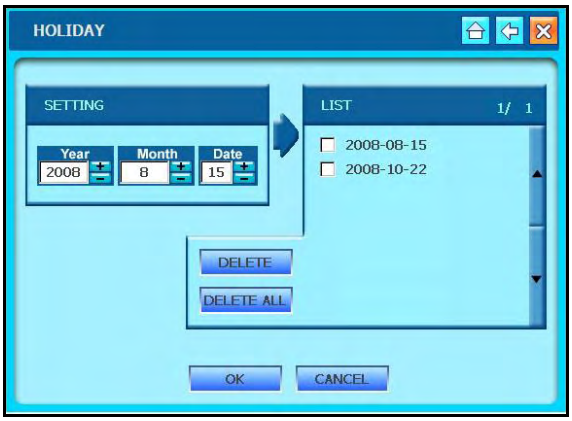
Click **OK** to save your settings or click **DEFAULT** to restore factory defaults.

Note: Sunday schedule is used for Holiday record setting. *See Holiday*.

Holiday

Set the system to record when you are away on holiday or for national holidays.

Note: Holiday records according to the *Sunday recording schedule*. Whatever recording mode(s) you have scheduled for Sunday will be used for dates in your Holiday list. *See Schedule*.



To set Holiday Recording:

Under **SETTING**, enter the date you want to include in the Holiday list.

Click  to add the date to the list.

Click **OK** to save your settings or **CANCEL** to quit without saving.

To delete dates from Holiday Recording:

1. Under **LIST**, check the box beside the specific date you want to delete.
2. Click **DELETE**.

OR

1. Click **DELETE ALL** without checking any boxes to delete all dates from the Holiday Recording list.

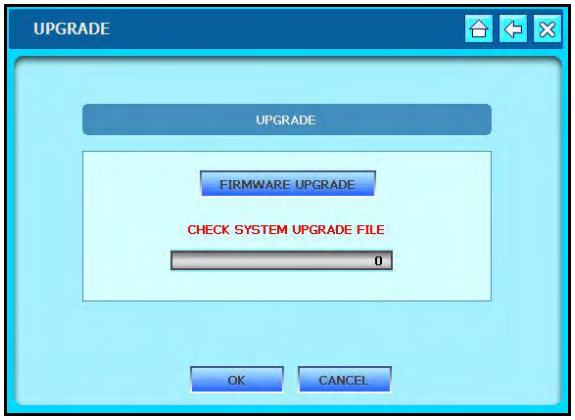
Click **OK** to save your settings or click **CANCEL** to quit without saving.

Backup / Upgrade

Upgrade system firmware and backup data to a USB flash drive (up to 8GB). If you need to backup a larger amount of data, it is recommended to use the Backup feature in Lorex Client. For more details, see page 66.

UPGRADE

New firmware is periodically available for download from the Lorex website (www.lorexcctv.com). You can update the firmware on the unit via the USB port on the front panel.



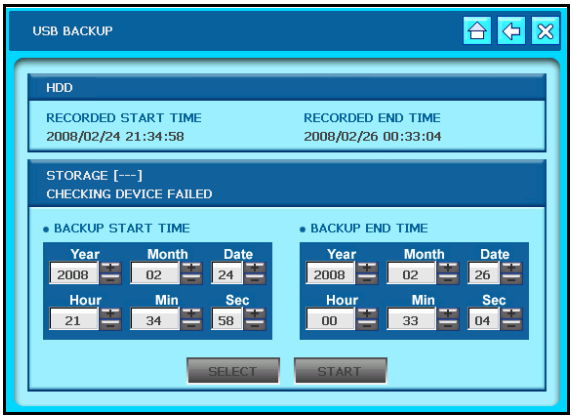
To upgrade the system's firmware:

1. Download the latest firmware for your system from www.lorexcctv.com to your computer and **copy the file** to a **USB flash drive.**
2. Insert the USB flash drive into the front panel of the system.
3. From the System Control Panel click  and click **UPGRADE**.
4. Click **FIRMWARE UPGRADE** for the system to detect the USB flash drive.
5. Click **START**. The Firmware Upgrade will take a few moments; the progress bar shows the status of the upgrade.
6. Once the upgrade is complete, click **OK** and exit the menu.
7. Disconnect and then reconnect the power cord from the back panel to reset the system.

USB BACKUP

Archive recorded data from the system by connecting an external USB flash drive.

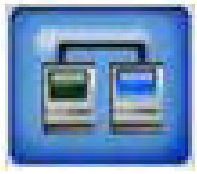
Note: Make sure you have deleted all data from the USB drive. The system will format the USB drive, erasing all data, in preparation for the archive process.



To backup data via USB:

1. Connect an external USB flash drive to the front panel of the system.
2. From the System Control Panel, click  and click **USB BACKUP**. You must enter your **username** and **password**.
3. Under BACKUP START TIME, enter the date and time for the start of backup.
4. Under BACKUP END TIME, enter the End Time for the conclusion of backup.
5. Click **SELECT** for the system to determine the total size of backup.

   Note: If the size of backup data is larger than the space on the USB drive, End Time will be adjusted automatically.
6. Click **START** to begin backup. When the backup finishes, exit the window and remove your USB device.

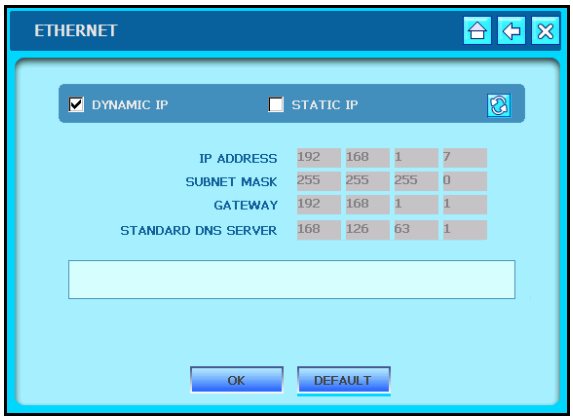


Network

Configure network settings and enable Lorex DDNS for remote viewing and email notification.

ETHERNET

Make sure you have connected your system to your network via the Network port on the rear panel. With the provided software, you can control the system remotely using a computer with Internet access.

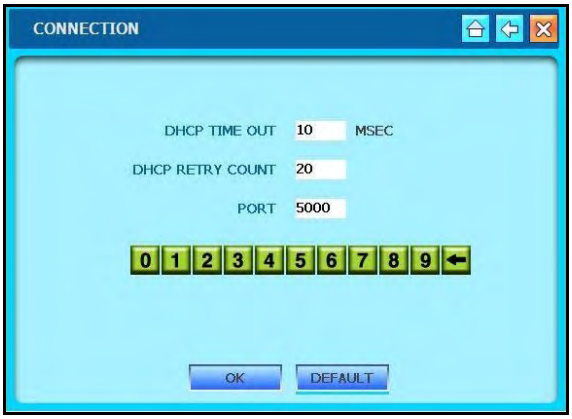


- **DYNAMIC IP**: Select the box if you have Internet service with a Dynamic IP address.
- **STATIC IP**: Select the box to enable a connection with a Static IP address. If using a Static IP, use the Virtual Keyboard to edit your IP Address, Subnet Mask, gateway, and Standard DNS Server.

Click **OK** to save your settings or **DEFAULT** to restore factory defaults.

CONNECTION

Configure the settings DHCP (Dynamic Host Configuration Protocol) settings. This affects how your system communicates with the router.



- **DHCP TIME OUT**: Set the time (in milliseconds) for the system to send/receive information from the router. Use a high value on a slow network and a low value on a fast network.
- **DHCP RETRY COUNT**: Set the interval for the system to try to reconnect to the router
- **PORT**: Set the port for the system to communicate with the router. By default, the system uses port 5000.

Click **OK** to save your settings or **DEFAULT** to restore factory defaults.

Tip: DCHP Mode allows you to connect quickly the first time by obtaining an IP address from the router. After the initial setup, we recommend that you select a Static IP and set the IP address between 1~100. For example, if your IP address is 192.168.0.107, change the last digits to 50 (i.e. 192.163.0.50).

This ensures that port forwarding will not change in the event of power failure or resetting of your network.

WEB SERVER

Configure the web port of the system.

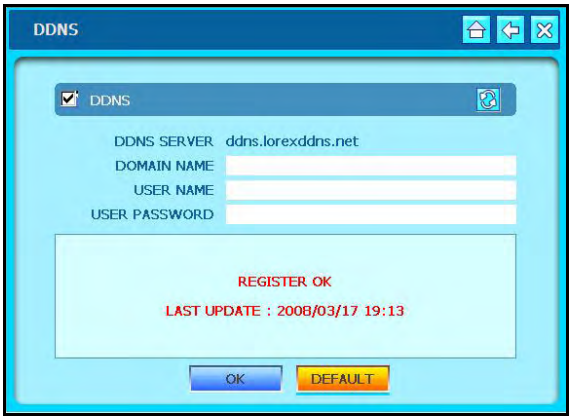


- **WEB SERVER**: Select the box to open the web port on the system.
- **WEB PORT**: The network port for your system to communicate with the router. By default, the web port is **80**. Use the Virtual Keyboard to change the value of the web port.

Click **OK** to save your settings or **DEFAULT** to restore factory defaults.

DDNS

Enable DDNS (Dynamic Domain Name System) to access your system from a fixed domain (website URL) without entering the IP address.



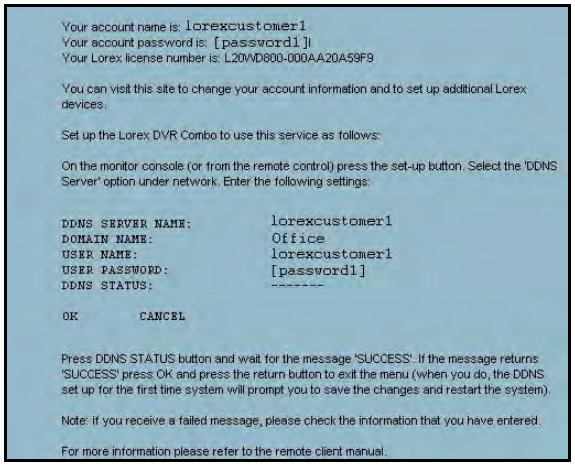
To enable DDNS:

1. In your browser, go to www.lorexddns.net and register for the free Lorex DDNS service.
   You will receive a confirmation email containing your Username, Password, and Domain name. *See* Appendix 3 *for more details.*

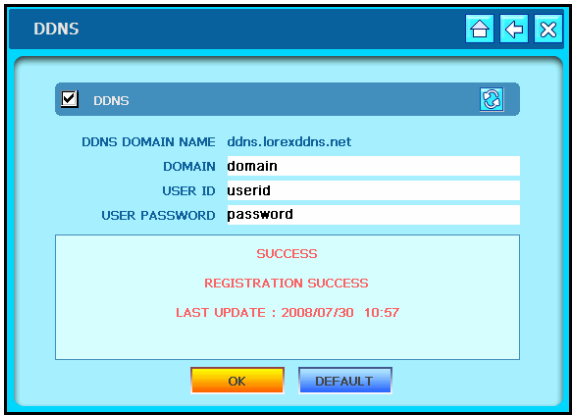


2. From the System Control Panel, click  and click **DDNS**.
3. Check the **DDNS box**.

4. Click the Domain text field to open the **Virtual Keyboard**. Enter your **Domain**, **User ID**, and **User Password**. You will be emailed this information once you register at www.lorexddns.net



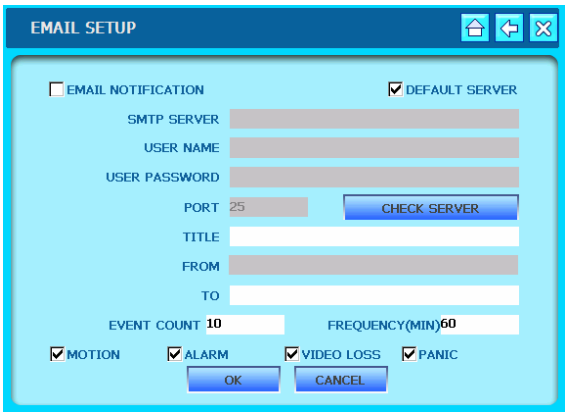
5. Click **OK** to test the connection. A SUCCESS screen should appear. If unsuccessful, make sure you have entered the DDNS information correctly.



EMAIL SETUP

Send email notifications for activity on the system. By default, the system is set to use Lorex DDNS as the default server, though you can also enter your own email provider.

Note: You *must* register for the free Lorex DDNS service in order to use the Email Notification feature. *See* Appendix *3 for more information on registering for Lorex DDNS service.*



To enable Email Notification using Lorex DDNS:

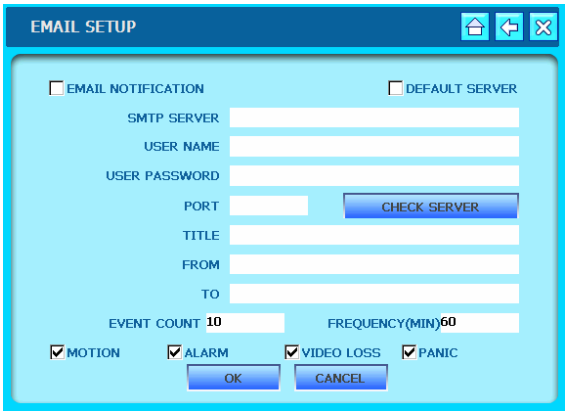
Note: By default, the DEFAULT SERVER box is selected in order to use the Lorex DDNS server.

1. Enter the subject heading for the notification in the TITLE field.
2. Enter the email address to send the outgoing email notification (i.e. jimsmith@yahoo.com).
3. Change the **FREQUENCY**: Frequency is how often the system will send an email notification for a triggered event (in minutes). The default Event Count is 10.
4. Select the boxes for **MOTION**, **ALARM**, **VIDEO LOSS**, or **PANIC** to set which event types you wish to send email notifications.

Click **OK** to save your settings or **DEFAULT** to restore factory defaults.

To enable Email Notification using *your own* email provider:

1. Deselect the **DEFAULT SERVER** box to use your own email provider.
2. Select the **EMAIL NOTIFICATION** box.



3. Enter your ISP's SMTP server information, along with your username and password for your email account.

   Note: You can obtain this information from your email application or by contacting your Internet Service Provider.

4. Enter **25** in the PORT field.
5. Enter the subject heading (Title), From, and To information for the email notification in the fields.
6. Change the Event Count and Frequency if desired.
7. Select the boxes for **MOTION**, **ALARM**, **VIDEO LOSS**, or **PANIC** to set which event types you wish to send email notifications.
8. Click **CHECK SERVER** to test if your SMTP server information is correct.

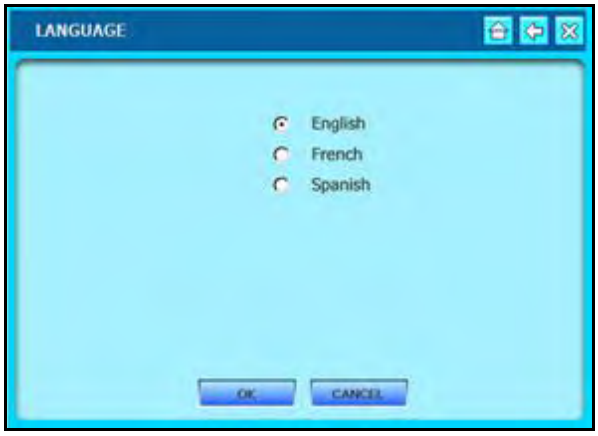
Click **OK** to save your settings or **DEFAULT** to restore factory defaults.



Language

Set the menu language for the system.

Set the system language to English, French, or Spanish.



To change the system language:

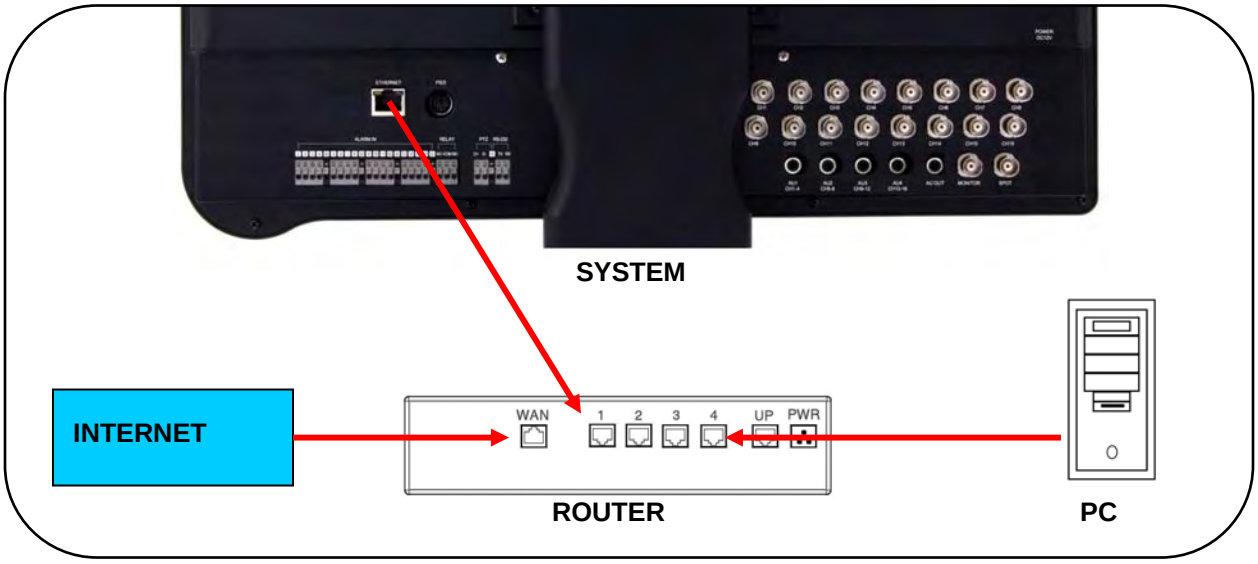
1. Select **English**, **French**, or **Spanish**.
2. Click **OK** to save your settings or **CANCEL** to exit without saving.

Setting Up Remote Viewing

You can control your system remotely using your existing network and the Lorex Client Software. Setting up the Remote Viewing feature demands several steps; networking skills are required to correctly setup the Remote Viewing functions.

What do you need?

- An integrated LCD / DVR system
- A computer with the installed Lorex Client Software (refer to the *Lorex Client Software Guide* for installation instructions)
- A router (no included) connected to a High-Speed Cable or DSL modem (for remote viewing of your system over the Internet outside your home network)



Network Setup / Remote Access Overview

To setup remote viewing:

1. With the system powered off, connect the system to the router using the included Ethernet cable.
2. Power the system on. You must connect the system to the router prior to turning on the system. This allows the system and router to communicate over the network.
3. Press and hold the Enter button on the front panel to find your system's IP address.
4. Enable Port Forwarding on your router. Refer to the included Router Guide and Basics of Remote Video Access Guide for further assistance with your specific network setup and hardware.
5. Setup an account at www.lorexddns.net

Networking Checklist

Use this checklist to confirm you have completed all the proceeding steps of the Network Setup.

☑ **1. I have the following:**

- High-Speed Internet
- Router
- Ethernet cable (provided with the system)
- PC with Lorex Client Software installed

☐ **2. I have turned off the system and performed the following:**

- Connected the Ethernet cable to the back of the system
- Connected the other end of the Ethernet cable to my router

Note: Network Setup will not work if you do not have a router.

☐ **3. I have found my System Information:**

- Press and hold the Enter button on the Front Panel for three seconds

OR

- System Main Menu>Configuration>System Information

My IP Address is: _____

My MAC Address is: _____

Note: If your IP Address is showing 127.0.0.1, please return to Step 1 and review all of your connections.

☐ **4. I have enabled Port Forwarding on my router:**

a. Port 80
b. Port 5000

Note: Each router is different, so port forwarding settings vary by model. Please visit us on the web at www.lorexcctv.com for assistance with the latest types of routers. If your router is not listed, please refer to your router's manual or contact your router's manufacturer for assistance.

☐ **5. I have configured DDNS for remote access to my system:**

Go to www.lorexddns.net and create a new account

Domain: _____

User ID: _____

Password: _____

☐ **6. I have configured my system to connect to the DDNS server:**

i. From the System Main Menu click NETWORK, and then click DDNS.
ii. Check the DDNS box.
iii. Enter your Domain, User ID, and User Password.
iv. Click OK to check the status of the DDNS connection.

Note: A success message should appear; if not, check your connections and DDNS account information.

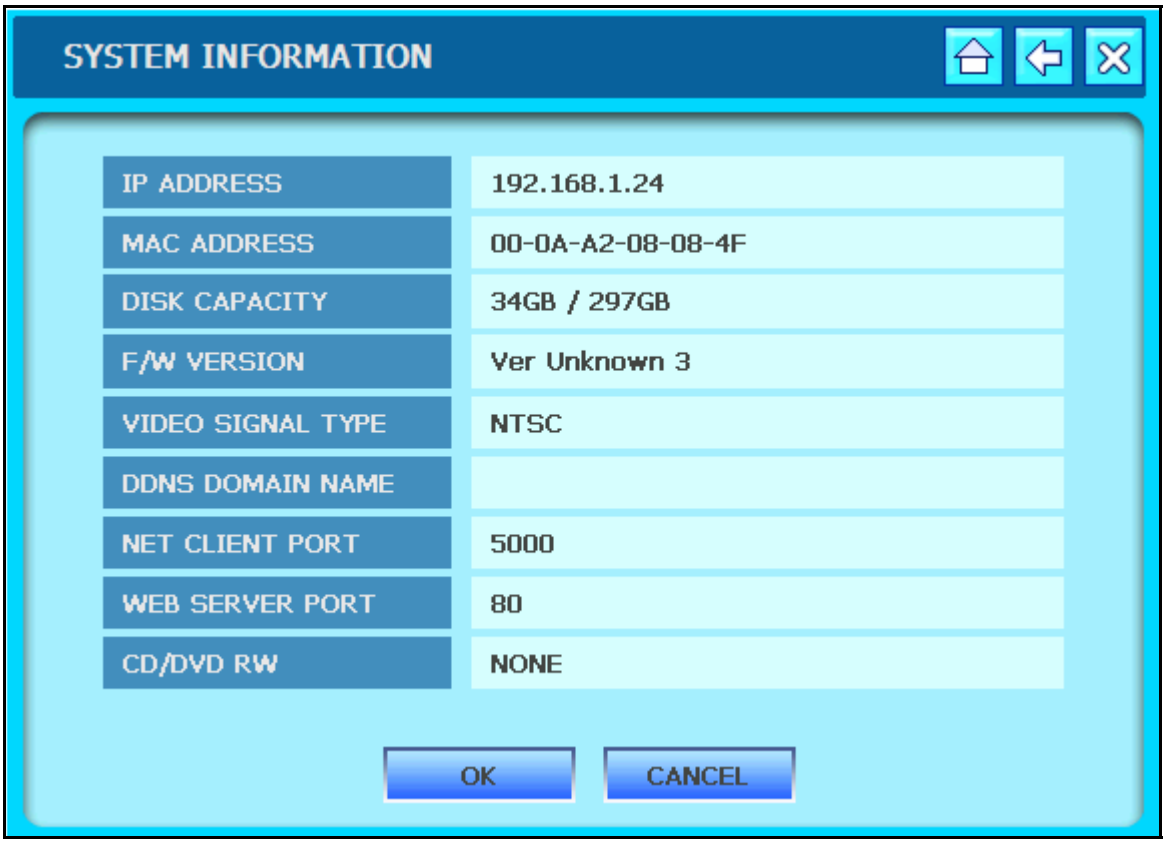
☐ **7. I have configured the Lorex Client Software:**

If you are connecting from within your network (i.e. the System and PC are both inside your house), you only need to enter the IP Address of your system into when configuring the Client software

If you are connecting from outside your network (i.e. the System is at home and your PC at work), use the DDNS domain name to configure the software.

How do I find my IP and MAC addresses?

The IP and MAC address of your system are necessary for DDNS setup. DDNS allows you to view and control your system from a remote location.



To find your IP and MAC addresses:

- Press and hold the **Enter** button on the Front Panel for three seconds.

OR

1. Move the mouse cursor toward the bottom of the screen to open the **Function Bar** and click  .
2. From the System Main Menu, click  and click **System Information**.

Finding Your External IP Address

If you wish to find your external IP address, you can use a third-party website such as http://www.showmyip.com

Your external IP address can also be found within your Router settings. Refer to your router user guide for further details.

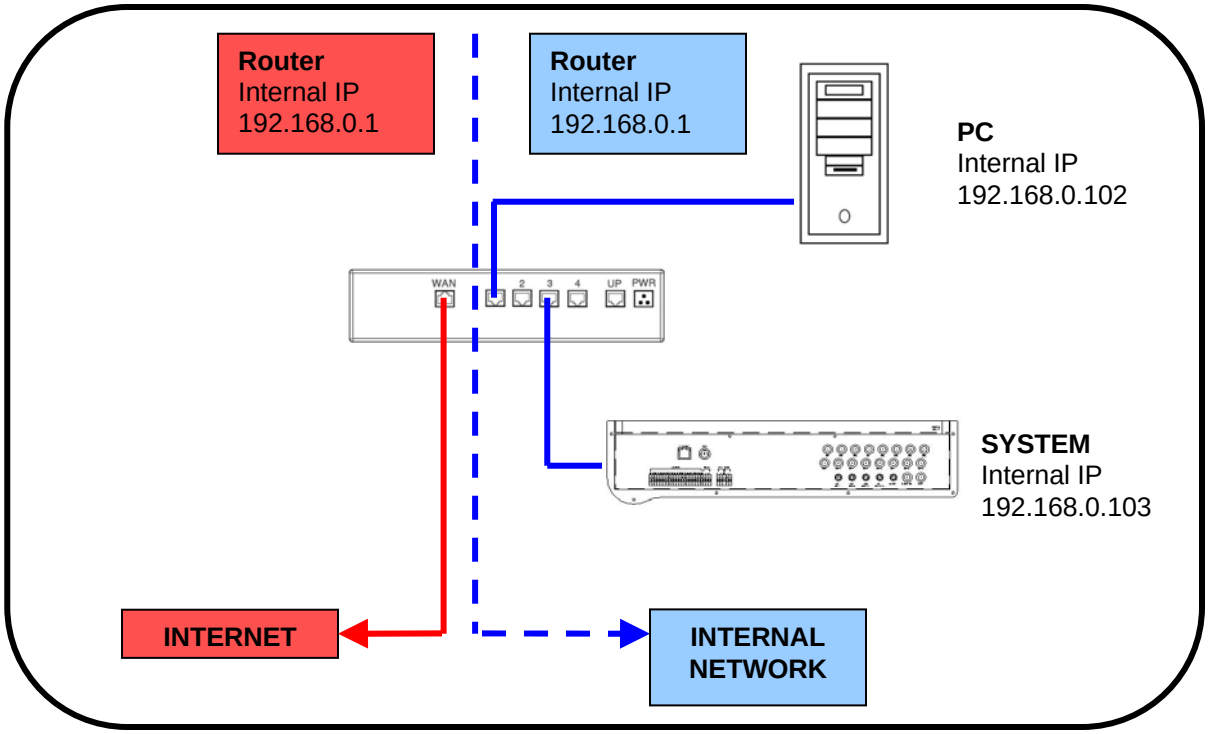
How do I enable Port Forwarding?

You need to enable port forwarding on your router to allow for external communications with your system for the following port:

- **PORT 5000**

Computers, DVRs, and other devices inside your network can only communicate directly with each other within the internal network. Computers and systems outside your network cannot directly communicate with these devices. When a system on the internal network needs to send or receive information from a system outside the network (i.e. from the Internet), the information is sent to the router.

NETWORK EXAMPLE



When a computer on the Internet needs to send data to your internal network, it sends this data to the external IP address of the router. The router then needs to decide where to send this data. This is where setting up Port Forwarding becomes important.

Port Forwarding tells the router to which device on the internal network to send the data. When you set up port forwarding on your router, it takes the data from the external IP address:port number and sends that data to an internal IP address:port number (i.e. Router External IP **216.13.154.34:6100** to DVR Internal IP **192.168.0.103:5000**).

The instructions found online in the Router Configuration Guides will assist you in the port forwarding configurations for a selection of different router models. Visit our Consumer Guides Support website at http://www.lorexcctv.com/support for more details.

How do I setup my DDNS account?

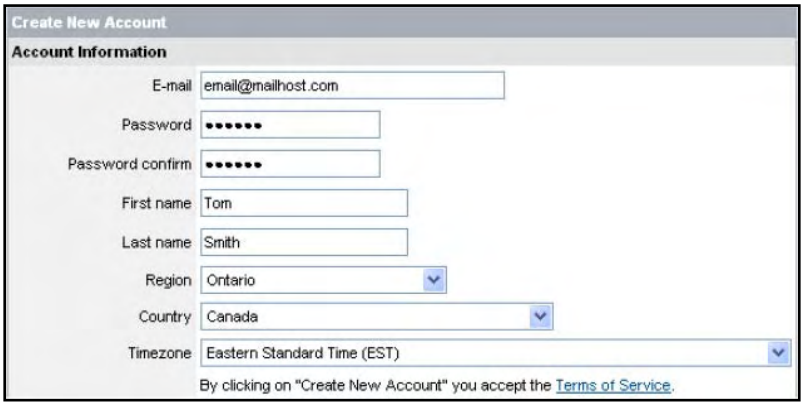
Lorex offers a free DDNS service for use with your system. A DDNS account allows you to set up a URL (website address) that points back to your Local Network.

To setup your free Lorex DDNS account:

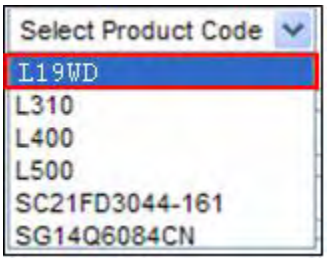
1. In your browser, go to www.lorexddns.net and click **Create Account**.



2. Complete the **Account Information** fields with your personal information. Complete the **Warranty Information** with your purchase details (optional).

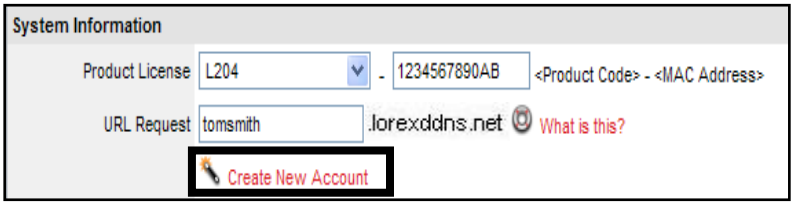


3. Complete the System Information fields:



   - **Product License**: Select your product model from the Product License drop down menu
   - **<Product Code> - <MAC Address>:** Locate the MAC address of your (recorded while loading the System)
   - **URL Request**: Choose a URL for your DDNS connection (i.e. your name, your company or business name, or anything of your choice.)

4. Once the information has been entered, click **Create New Account**.



How do I setup my DDNS account? (cont'd.)

Your Account information will be sent to you at the email Address you used in Step 2.

Service Provider:	dns1.lorexddns.net
User Name:	tomsmith1
Domain Name:	tomsmith
Password:	(your password)

You will need this information for remote access to your System. Record your information below:

User Name: _____

*Domain Name: _____

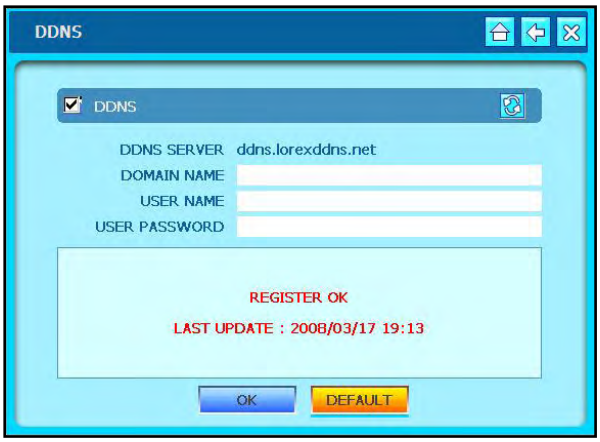
Password: _____

* Only the first part of the Domain Name is required for setup on the System. For example, if the full domain sent is tomsmith.lorexddns.net, the unit only requires that only *tomsmith* be entered.

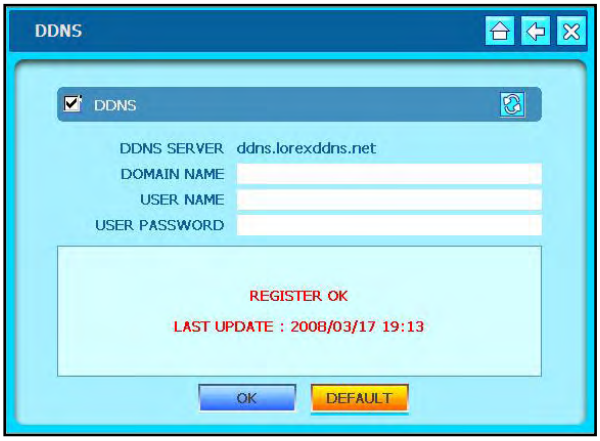
How do I enable DDNS on my system?

Once the DDNS settings have been configured online, you must enter the information on the system.

1. Open the System Main Menu and click  and then click **DDNS**.



2. Select the **DDNS box** in the top-left corner. From the Lorex DDNS confirmation email, enter your **Domain**, **User ID**, and **User Password** using the Virtual Keyboard



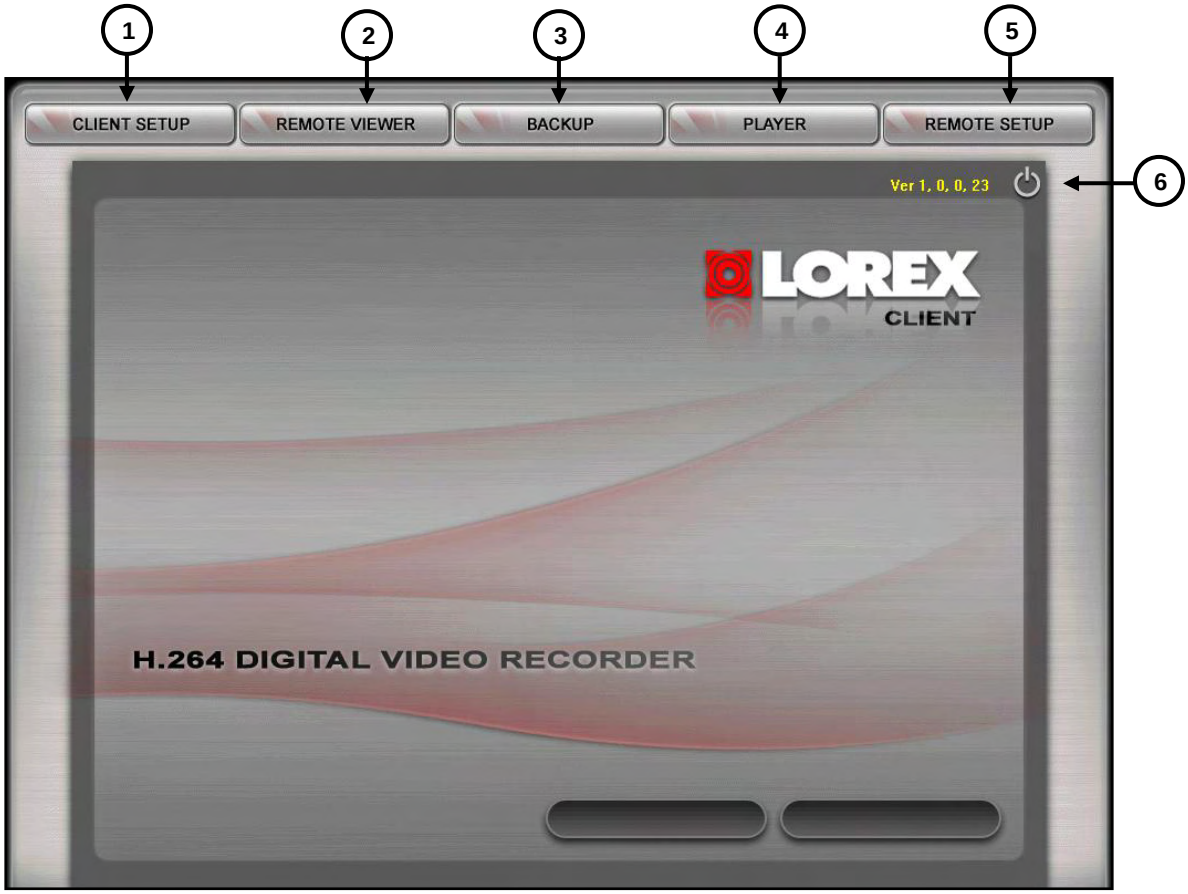
3. Click **OK** to test the status of the DDNS connection.

Note: A Success message appears if the system successfully connects the DDNS Server on the Internet. If not, check your connection and your DDNS information.

How do I setup the Lorex Client Software?

Note: The following pages are a Quick Setup for Lorex Client. Please refer to “Lorex Client & Message Master” on page 64 for complete information on using the Lorex Client.

The Lorex Client software allows you to remotely configure and monitor your system, and record and playback video from a PC.



1. **CLIENT SETUP**: Configure the Client software to connect to your system.
2. **REMOTE VIEWER**: View live video, search, and playback recorded data on your System.
3. **BACKUP**: Backup recorded video from your system to your PC.
4. **PLAYER**: Playback recorded backup video data on your PC.
5. **REMOTE SETUP**: Change settings on your system remotely.
6. **Power**: Click to quit the program.

Setting up the Lorex Client

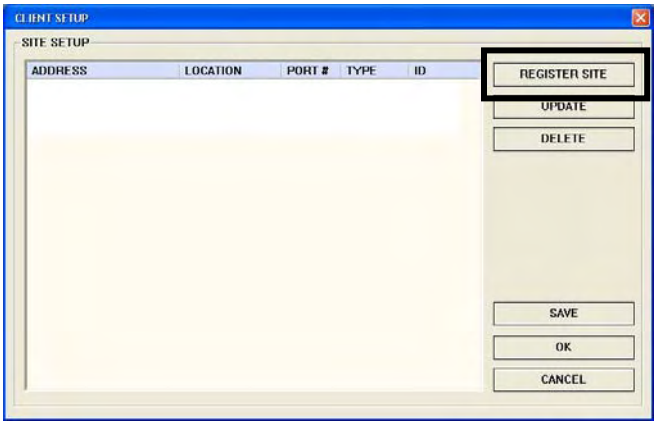
You need to setup and configure the Lorex Client in order to use the Remote Viewing function of your system. Make sure you have completed the free Lorex DDNS setup before using Lorex Client.

To setup the Lorex Client:

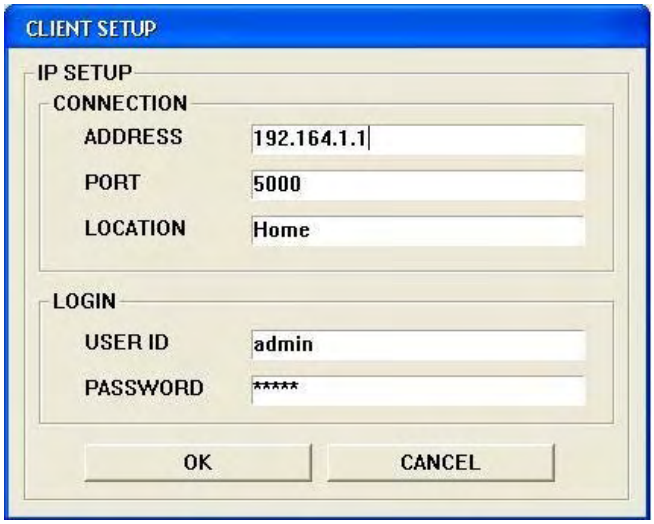
1. Double-click the **Lorex Client icon** on your desktop.
2. From the Lorex Client main window, click **Client Setup** in the top-left corner.



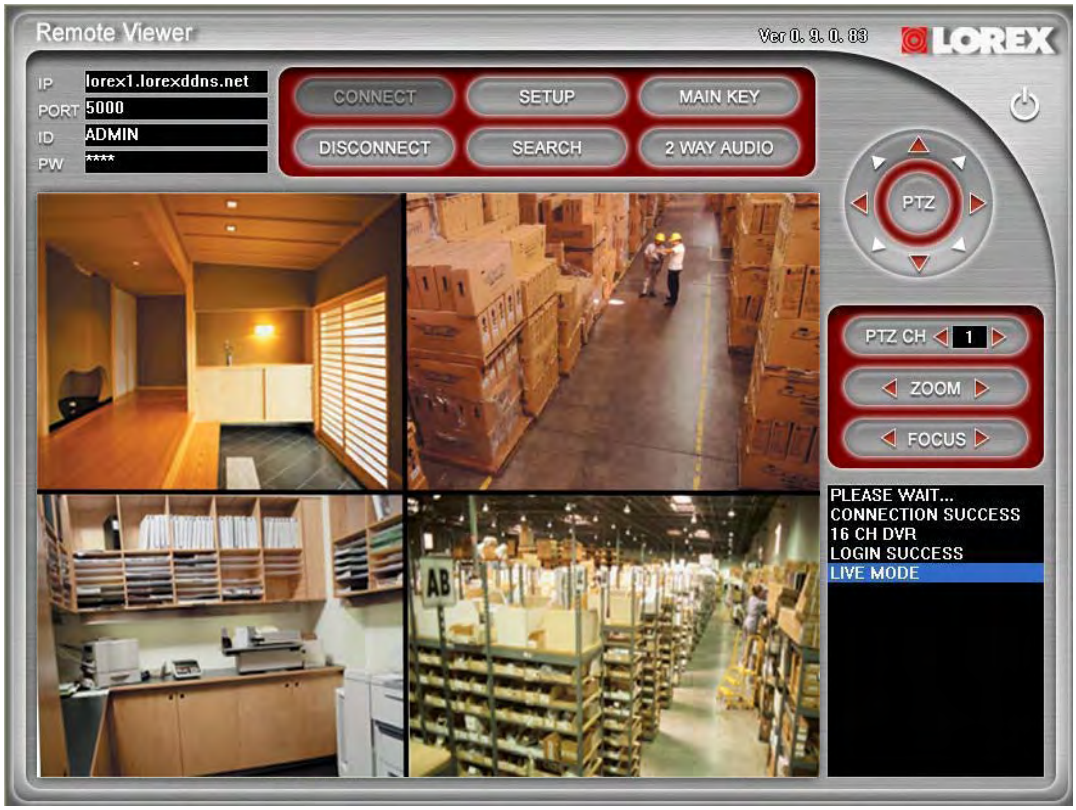
3. From the Client Setup window, click **Register Site**. A new window opens for you to input your system's network information.
4. Under IP Setup, enter your system's **DDNS URL or IP address**; enter **5000** in the Port field. In the Location field, enter a **name** for the location of your system (i.e. Home, Work).



5. Under Login, enter the **User ID** and **Password** for your system and click OK.
6. Select your newly added site and click **OK**.



LOREX CLIENT 7.0
& LOREX MESSAGE MASTER



About Lorex Client 7.0

The Lorex Client 7.0 software package allows you to access your system from a remote location and perform the following:

- View live video
- Search and playback recorded data
- Configure your system
- Backup data to your PC
- Send text and images to your system using Lorex Message Master

System Requirements

Lorex Client 7.0 requires the following:

Minimum system requirements:

Description	Requirement
Operating system	Windows Vista (32-bit) Windows XP Professional Windows XP Home Edition
Processor	Pentium IV 1.5 GHz (or equivalent)
Memory	512 MB RAM
Hard disk	50 MB installation required

Recommended system requirements:

Description	Requirement
Operating system	Windows Vista (32-bit) Windows XP Professional
Processor	Pentium IV 3 GHz (or equivalent)
Memory	1 GB RAM
Hard disk	50 MB installation required *Additional hard disk space required for recording. File size will vary depending on recording quality settings.
Internet	Requires a high speed internet connection (minimum upload speed: 256Kb/s, download speed512Kb/s) and a broadband router – not included. Please check with your Internet Provider for your current upload and download speeds.

Installing Lorex Client 7.0

To install Lorex Client 7.0:

1. Place the Installation CD in the DVD/CD-ROM drive of your Computer. From the Install Wizard window, click **Next** to continue with the installation.

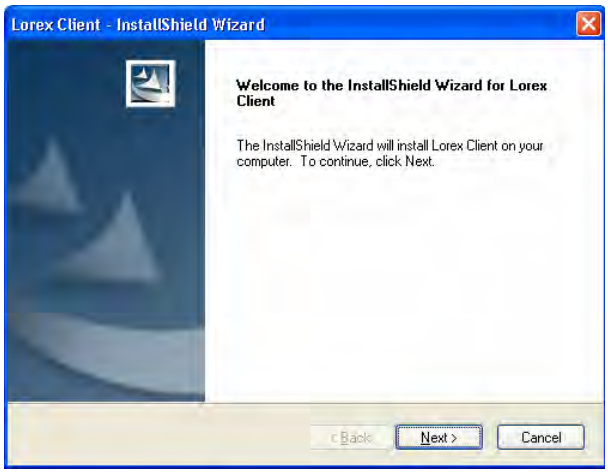


Figure 1.0 Install Shield Window

2. Click **Next** to accept the default installation location for the software. Click **Change…** to choose a different location.
3. Click **Install** to start the installation. Installation takes a few moments, depending on your system. If AutoRun does not start, you need launch the installer file manually:
    i. Double-click the My Computer icon on your Desktop.
    ii. Double-click the CD-ROM Drive (Drive letter will vary depending on the number of drives in your computer).
    iii. Double-click **LOREXCLIENT.exe** to start the installation (may appear as LOREX CLIENT with no file extension, depending on your system settings).
4. Once the installation finishes, click **Finish** to complete the installation and exit the wizard.

    Note: You should restart you system after installing the Lorex Client software. Save your work and close all application windows prior to restarting your system.

Opening Lorex Client

When installation completes, you can open Lorex Client through the Start Menu or from the Desktop icon.



To open Lorex Client:

- *Desktop*: Double-click the **Lorex Client icon**
- *Start Menu*: Click Start>Programs> **Lorex Client**

Lorex Client Main Menu

The Lorex Client software allows you to perform multiple functions from a remote location over the Internet or local area network (LAN).

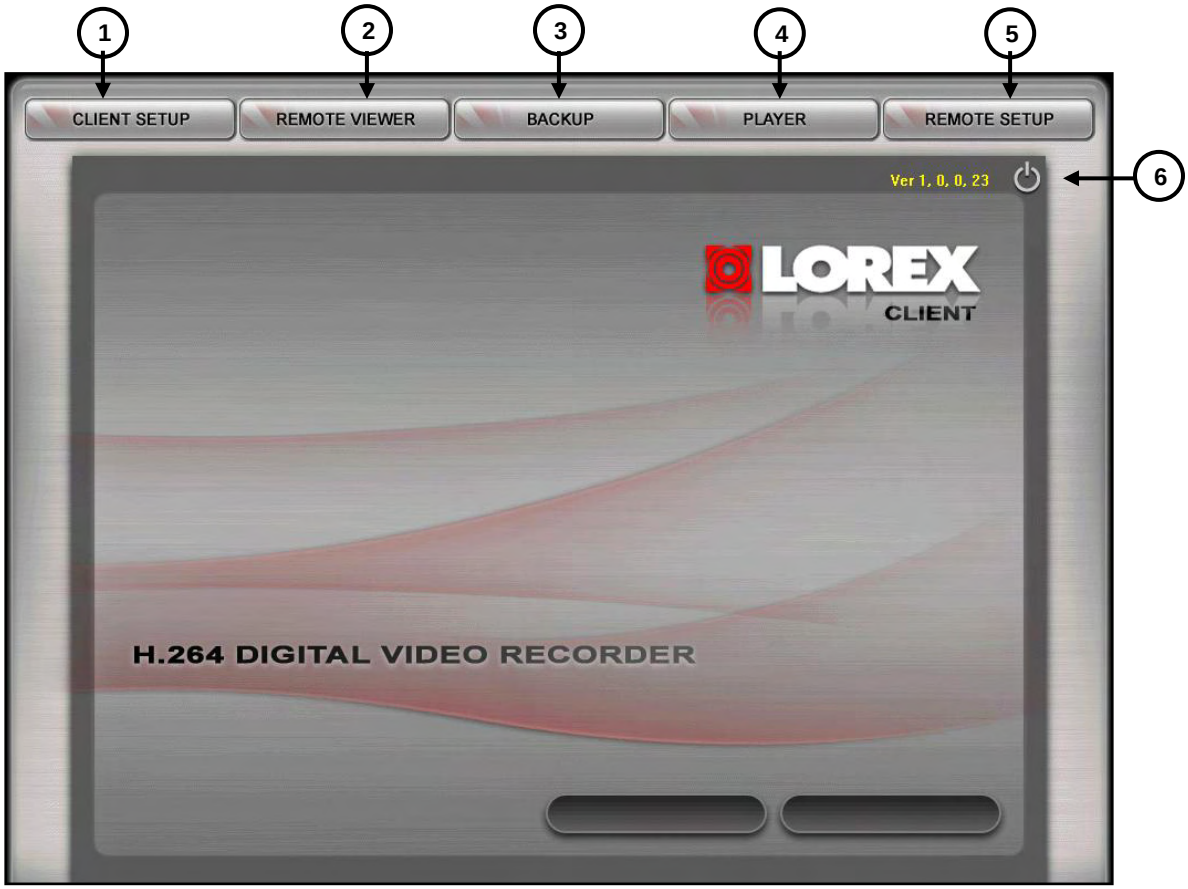


Figure 2.0 Lorex Client Main Window

1. **CLIENT SETUP**: Configure the Client software to connect to your system.
2. **REMOTE VIEWER**: View live video, search, and playback recorded data on your System.
3. **BACKUP**: Backup recorded video from your system to your PC.
4. **PLAYER**: Playback recorded backup video data on your PC.
5. **REMOTE SETUP**: Change settings on your system remotely.
6. **Power**: Click to exit the program

Setting up the Lorex Client

You must setup and configure Lorex Client in order to use the Remote Viewing function of the software. Use Client Setup to register your system's DDNS URL or IP address (LAN connection).

If you are connecting from within your network (i.e. the System and PC are both inside your house), you only need to enter the IP Address of your system when configuring the Client software. If you are connecting from outside your network (i.e. the System is at home and your PC is at work), use the DDNS domain name to configure the software.

We recommend that you complete the free Lorex DDNS Network Setup prior to using the Lorex Client. See Appendix C for more details.

To setup the Lorex Client:

1. Open Lorex Client.
2. From the Lorex Client main window, click **CLIENT SETUP** in the top-left corner.
3. From the Client Setup window, click **REGISTER SITE**. A new window opens for you to input your network information.
4. Under IP Setup, enter your system's **DDNS URL or IP address**; enter **5000** in the Port field. In the Location field, enter a **name** for the location of your system (i.e. Home, Office).
5. Under Login, enter the User ID (by default, **admin**) and Password (by default, leave the password field **blank**) for your system and click **OK** (see Figure 3.0).
6. In the main Site Setup window, select the newly added site and click **OK**.

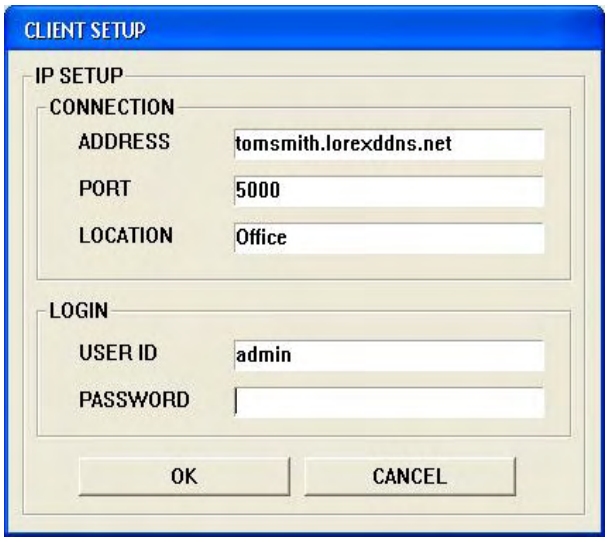


Figure 3.0 DDNS site registration

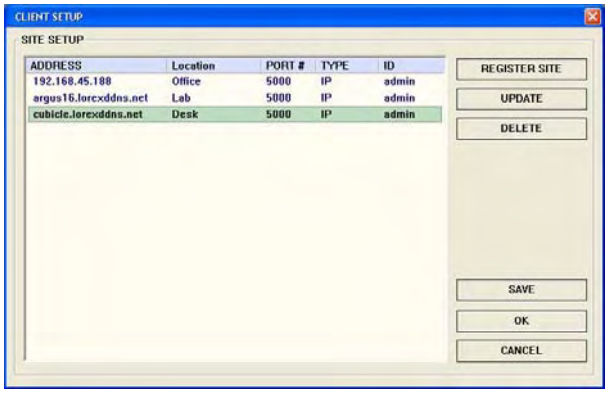


Figure 4.0 Site Setup

Editing a Site

To edit a saved site:

1. Select a site from the Address list and click **UPDATE**.
2. Enter the new connection and/or user information and click **OK**.
3. In the Site Setup window, select the edited site and click **SAVE**.
4. Click **OK** to exit.

With your system information saved in Lorex Client, you can now use *Remote Viewer* to view live video from your system.

Lorex Remote Viewer

Use Lorex Remote Viewer to monitor and control your system from a computer in a local or remote location. Many of the changes you make in the Remote Viewer will be mirrored on your system.

To launch Remote Viewer:

1. From the Lorex Client main window, click **REMOTE VIEWER**. The Remote Viewer window opens.
2. Click **CONNECT** to log in to the System.



Figure 5.0 Remote Viewer main window (connected to system)

1. **Main Screen Camera View**: Displays live video from the cameras and video during playback.
2. **Connection Information**: Displays the connection information from Remote Setup, or you can enter information manually:
   - **IP**: The IP address of the Remote System
   - **PORT**: The Port number for the Remote System (default 5000)
   - **ID**: Enter the User ID (default **admin).**
   - **PW**: Leave the password field **blank** (default password).
3. **Function Buttons**:
   - **CONNECT / DISCONNECT**: Use to connect to, or disconnect from the Remote System.
   - **SETUP**: Use the setup to configure the data transfer settings.

- **SEARCH**: Search for recorded data on the Remote System according to Date/Time, Event, and Bookmark. See Figures 16~18.
- **MAIN KEY**: Click to open a floating window with advanced controls. *See* Using the Main Key.
- **2 WAY Audio**: Click to enable 2-Way audio from the PC to the Remote System.

4. **Power**: Click to close the Viewer window.
5. **PTZ Control**: Click the center PTZ button to enable control for the connected PTZ cameras (not included). Use ZOOM and FOCUS to adjust image.

   Note: PTZ control occurs only in full-screen mode. If you have more than one PTZ camera connected to the Remote System, click ◄► to change between PTZ channels.

6. **Status**: View the status of the connection, type of Remote System, and playback mode.

Configuring Remote Viewer

You can adjust the bit-rate, frame rate, and audio of the data stream between the Remote System and your PC.

From the Remote Viewer window, click **SETUP**.

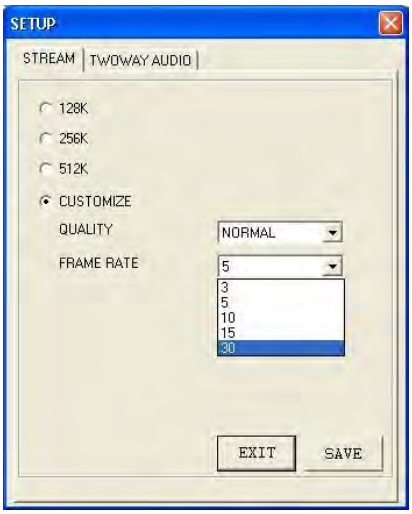


Figure 6.0 Customize Quality and Frame Rate

Stream

Click the **128K**, **256K**, or **512K** radio buttons. The higher bit-rate results in a higher quality image but uses more bandwidth. Adjust the bit-rate depending on your PC and network connection. You can also customize the data stream according to Quality and Frames-per-Second. *See* Figure 6.

Click the **CUSTOMIZE** radio button, and configure QUALITY and FRAME RATE:

QUALITY: **NORMAL**, **ENHANCED**, **FINE**, or **SUPER FINE**. Adjust the image resolution to best fit your recording environment and network speed.

FRAME RATE: **3**, **5**, **10**, **15**, **30**. Typically, a higher frame rate should result in a smoother image, however, due to H.264 compression and bandwidth constraints, we recommend setting the frame rate from 10~15 FPS for high quality network viewing.

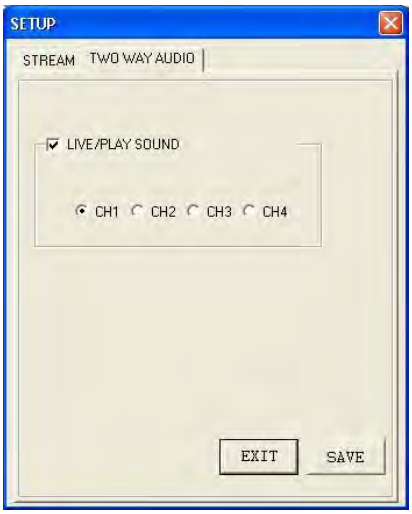


Figure 7.0 Live Audio Selection

Two-Way Audio

Select **LIVE/PLAY SOUND** to turn audio on the Remote Viewer on/off.

With Audio on, you can select the audio channel from the Remote System for listening.*

Click **SAVE** to save your changes. The Client writes the changes to the system.

Click **EXIT** to exit without saving.

*Number of audio channels varies by model.

Using the Main Key

The Main Key contains advanced controls when using the Remote Viewer.

1. **Channels**: Click the numbers to view the camera channels in full-screen.
2. **Display Modes**: Change the display in the main screen to Quad or Split-Screen views
3. **Functions**: Use the various functions and modes of the Remote System:
   - **PANIC**: Click to start PANIC Recording on the Remote System; click again to cancel.
   - **PLAY**: Begin Playback of the most recently record data.
   - **STOP**: Cancel Playback.
   - **MODE**: Change the display modes: full-screen, Quad, and Split-Screen.
   - **SEQ**: Enable/disable Sequence mode.
   - **PIP**: View Picture-in-Picture mode. Channels in inset frame cycle based on settings of the Remote System.
   - **UNFRZ**: Enable/Disable Freeze mode.
   - ZOOM: Zooms into a camera channel in full-screen mode.
   - **PAUSE**: Pause Live mode, playback, zoom, or sequence.
   - **+ / –** : Click to switch between display modes.

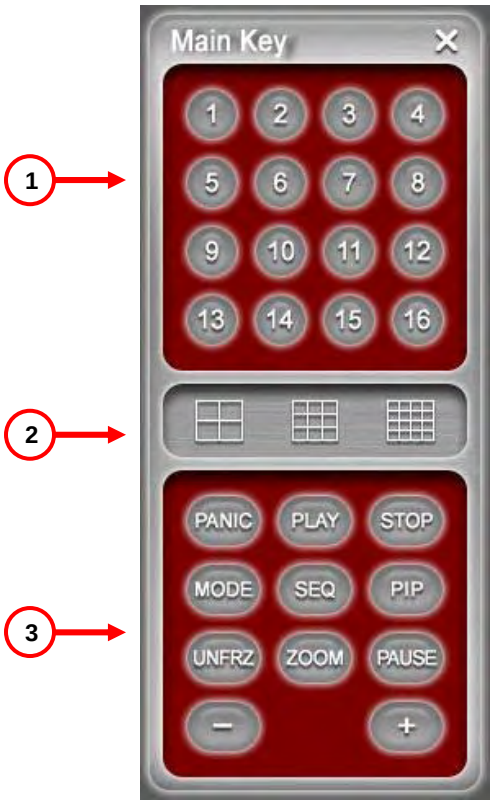


Figure 8.0 Main Key controls

Using PTZ controls

1. Click the PTZ button to control PTZ cameras connected to the system (not included).

Note: Main Key buttons are grayed out when using the PTZ controls.

- **PTZ Controller**: Click the navigation arrows to pan and tilt the camera.
- **PTZ CH**: Click ◀ ▶ to switch between PTZ camera channels.
- **ZOOM**: Click ◀ ▶ to zoom in/out.
- **FOCUS**: Click ◀ ▶ to sharpen image (if available on your PTZ camera).

2. Click the PTZ button again to exit PTZ controls.



Figure 9.0 PTZ Controls

Search Options

Use the Search function in Remote Viewer to search for recorded data on the system according to Percent/Date, Event List, and Bookmark List.

Note: Search is unavailable if your system is in DID mode.

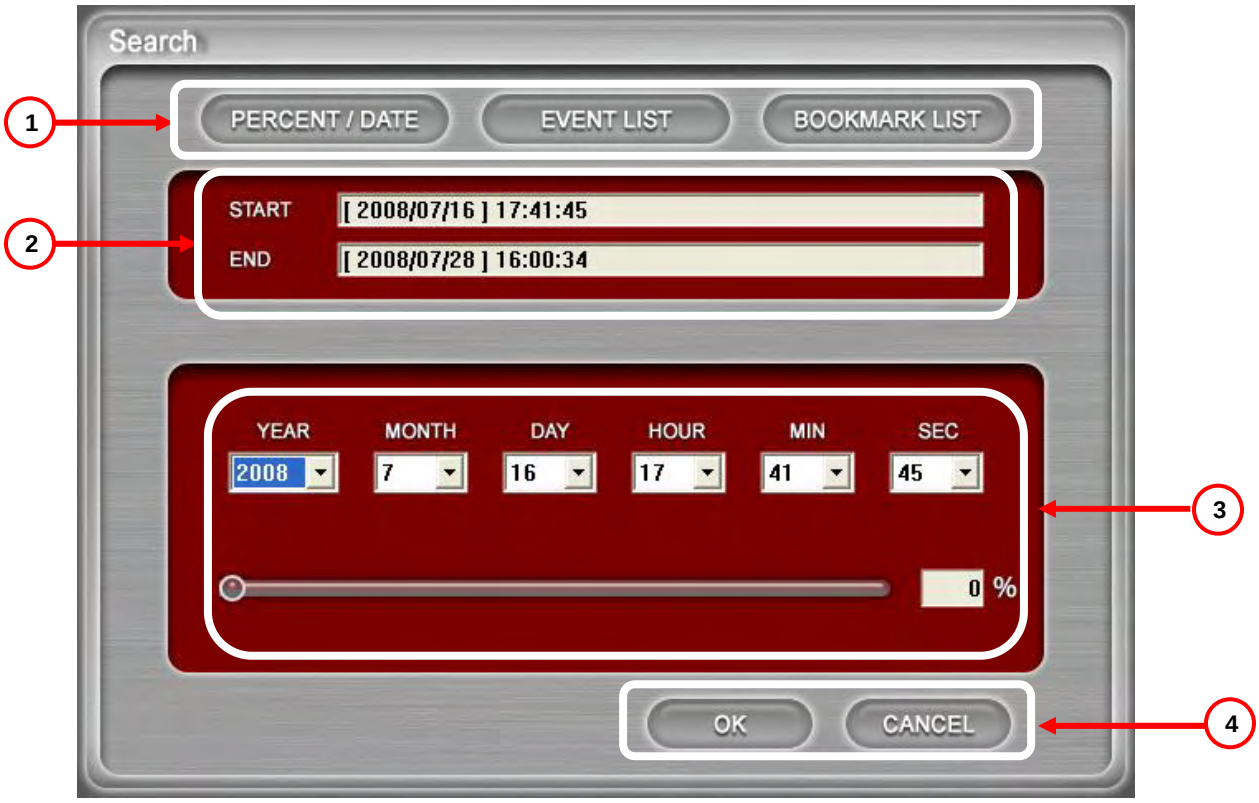


Figure 10.0 Search menu

1. **Search Type:**
   - **PERCENT/DATE**: Search according to used capacity of the hard drive or date & time.
   - **EVENT LIST**: Search according to events, including Motion and Alarm.
   - **BOOKMARK LIST**: Search according to bookmarks.

2. **START/END Time**: Start and End times for the recorded data on the System hard drive.
3. **PERCENT/DATE**: Click the drop-down menus to search by date and time or; move the slider to search according to percentage of hard drive space.
4. **OK/CANCEL**: Click OK to save settings; click CANCEL to exit without saving.

Search by Percent/Date

Search recorded data on the system hard drive according to date / time or percentage of hard drive space.

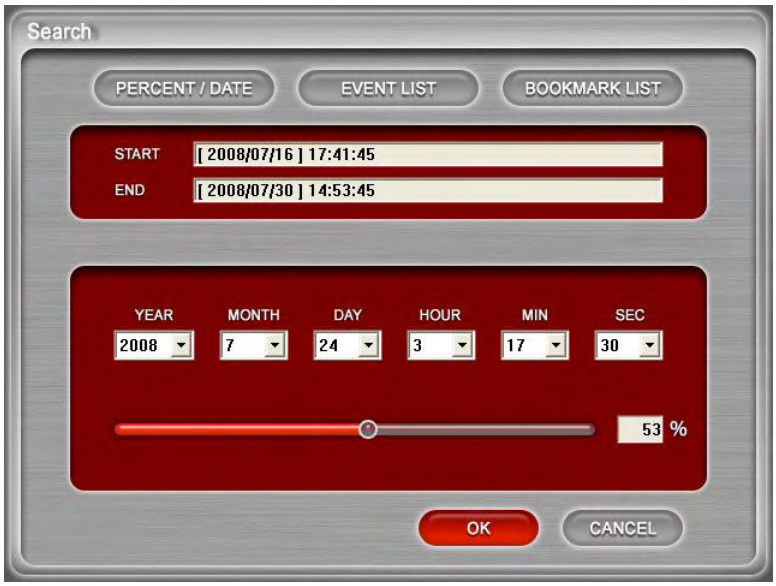


Figure 11.0 Percent/Date search

To search by date:

1. Click **SEARCH** to open the Search Menu. By default, the Search main window is the Percent/Date Menu.
2. From the drop-down menus, select the YEAR, MONTH, DAY, HOUR, MIN, and SEC.
3. Click OK

To search by percentage:

1. Click and drag the slider to adjust the percentage of hard drive space. The date and time in the drop-down menus will change as you adjust the slider.
2. Click **OK**.

The main screen turns blue as the system loads the recorded video; recorded video will play after a few moments. Open the Main Key to change display views.

The Playback Toolbar opens in the top-left corner of the Remote Viewer main window. Use the Playback Tool bar to view video in normal and reverse playback.



Figure 12.0 Playback Toolbar

Note: Closing the Playback Toolbar stops playback of the recorded video.

Search by Event List

Search for recorded data on the system according to Motion and Alarm events.



Figure 13.0 Event List search

To search by Event List:

1. From the Search main window, click **EVENT LIST**.
2. Click the **date** in the Calendar pane to view events for that date. Click **«»** in the Calendar pane to switch between months.

Note: In the Event Calendar, dates in *yellow* have events; dates in *white* do not have events.

3. Select an event in the Index window and click **OK** to view recorded video. Use the scroll bar and/or  to find events for that date; click  to turn pages.

The main screen turns blue as the system loads the recorded video; recorded video will play after a few moments. Open the Main Key to change display views.

The Playback Toolbar opens in the top-left corner of the Remote Viewer main window. Use the Playback Tool bar to view video in normal and reverse playback.



Figure 14.0 Playback Toolbar

Note: Closing the Playback Toolbar stops playback of the recorded video

Search by Bookmark List

Search recorded data on the System according to Bookmarks.

Note: If you do not see any bookmarks in the list, there are no bookmarks saved on your system. For details on setting bookmarks, see “Setting Bookmarks” on page 32.

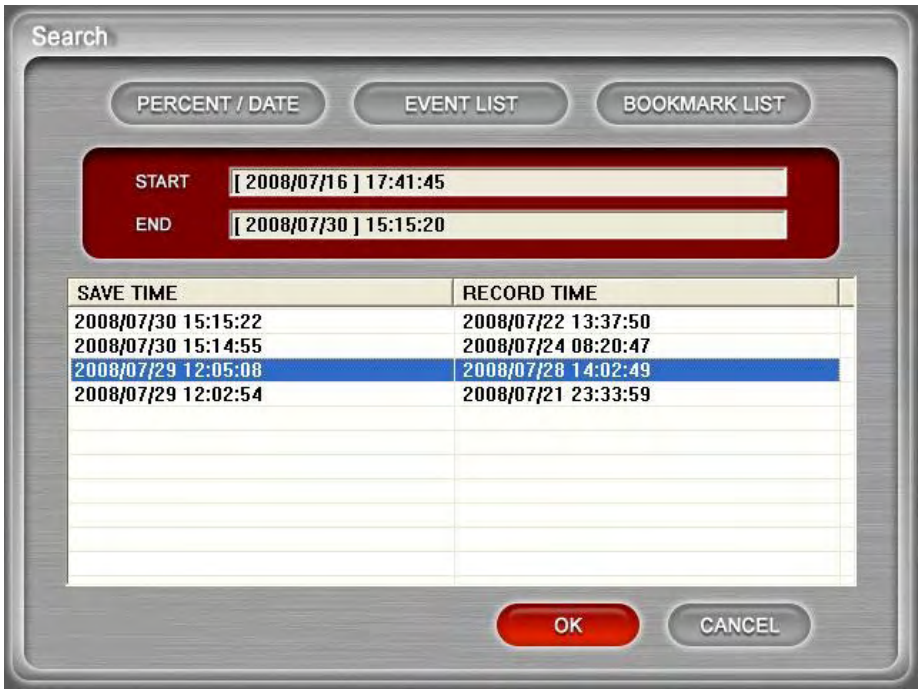


Figure 15.0 Bookmark List search

To search by Bookmark List:

1. From the Search main window, click **BOOKMARK LIST**.
2. Select a bookmark from the list and click **OK** to view recorded data.

The main screen turns blue as the system loads the recorded video; recorded video will play after a few moments. Open the Main Key to change display views.

The Playback Toolbar opens in the top-left corner of the Remote Viewer main window. Use the Playback Tool bar to view video in normal and reverse playback.



Figure 16.0 Playback Toolbar

Note: Closing the Playback Toolbar stops playback of the recorded video

Lorex Client Backup

Lorex Backup lets you archive recorded video data from your system to your computer. You can then view archived data using Lorex Player.

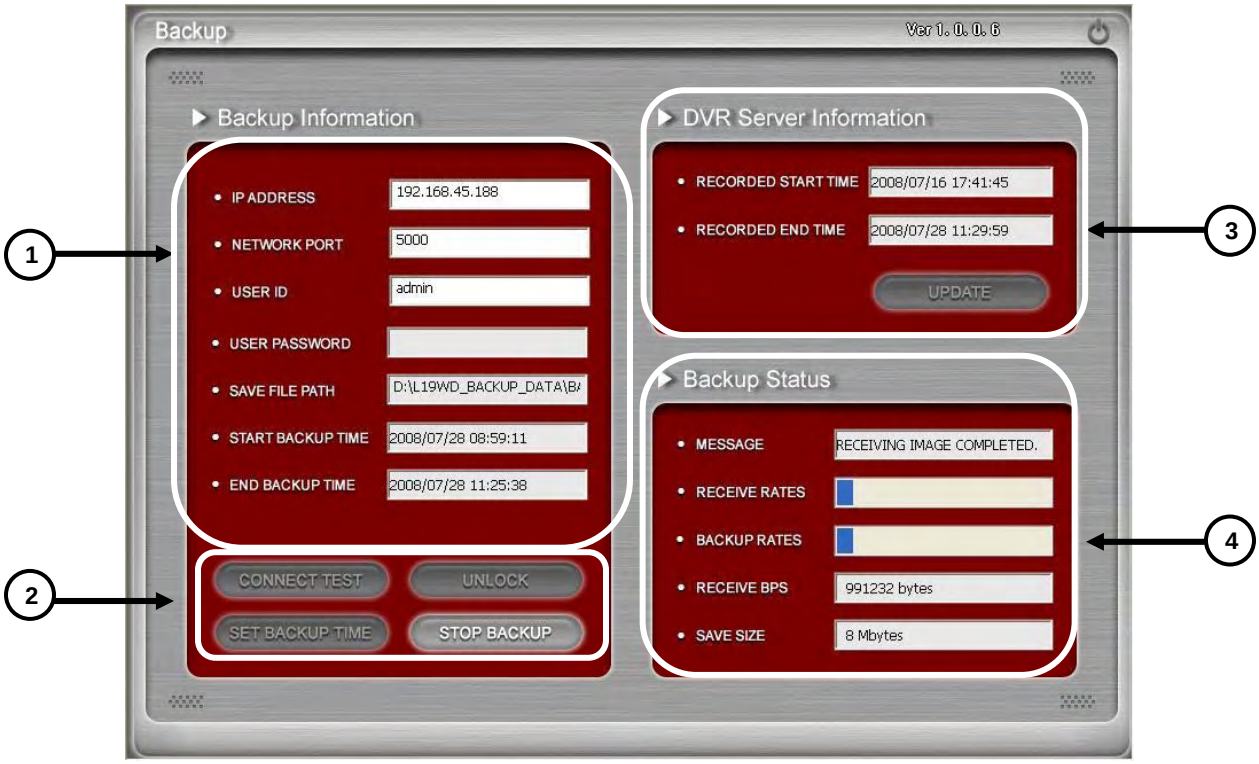


Figure 17.0 Lorex Client Backup Main Window

1. **Backup Information**: Enter the Remote System's connection information including:
   - **IP Address**: The IP Address of the Remote System
   - **Network Port**: The network access port of the remote system (by default, 5000).
   - **User ID**: Enter **admin**.
   - **User Password**: By default, leave the password field **blank**.
   - **Save File Path**: Set a path to save the backup file (This function is active only when the connection is established).
   - **Start Backup Time**: The start time of the file backup (This function is only active when the connection is established).
   - **End Backup Time**: The end time of the file backup (This function is only active when the connection is established).

2. **Connection Setup**:
   - **Connect Test**: To test the connection status.
   - **Unlock**: To get the record start/End time of Remote System.
   - **Set Backup Time**: Set the start/end time, size and path of file backup.
   - **Start Backup**: Active the backup function.

3. DVR Server Information – The information of the Remote System sever:

- **Recorded Start Time**: Indicate the recorded start time.
- **Recorded End Time**: Indicate the recorded end time.
- **Update**: Update the recorded time.

4. Backup Status:

- **Message**: Indicate the backup status.
- **Receive Rate**: Indicate the percentage of backup image received.
- **Backup Rate**: Indicate the completed percentage of backup image received.
- **Receive BPS**: Indicate the bps of backup image received.
- **Save Size**: Indicate the size of backup image saved.

Using Lorex Backup

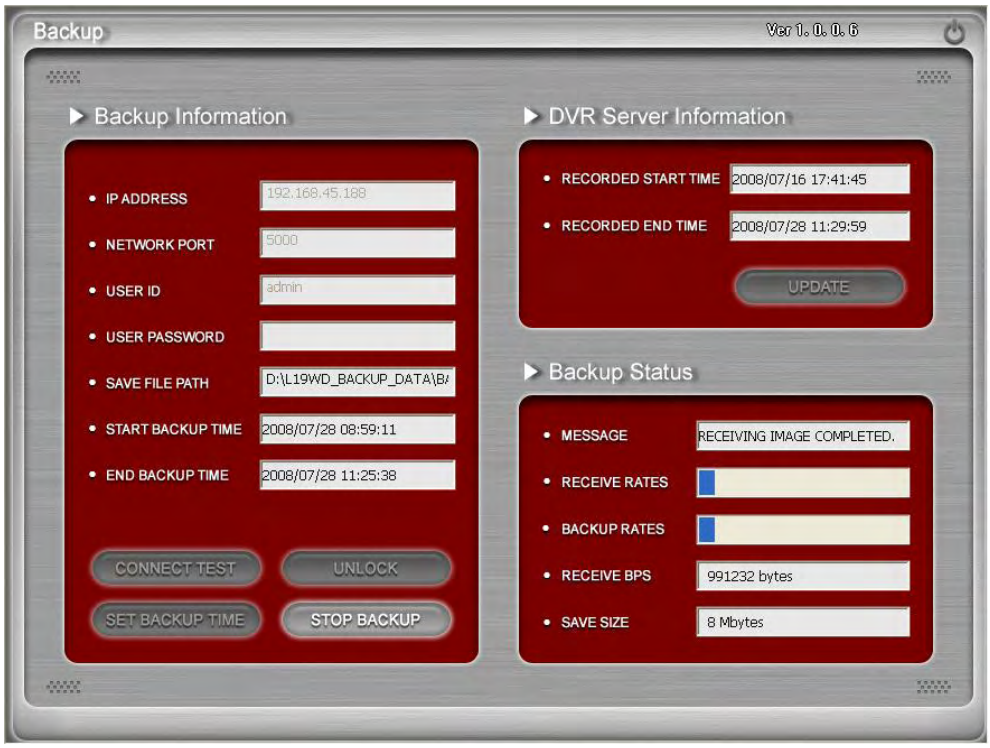


Figure 18.0 Backup menu

To use Lorex Backup:

1. From the Lorex Client main window, click **BACKUP**. The Lorex Backup main menu opens.
2. Click **CONNECT TEST** to test the status of the system connection. You should see a *"Success Connect Test"* message.
3. Click **LOCK** to initiate the Recorded Start Time and Recorded End Time.
4. Click **SET BACKUP TIME**. Backup Time Information Window opens.

5. In the Backup Information window, click **BROWSE** to set the file path for saving the backup data (see Figure 25).
6. Click the drop-down menu to set the maximum file size for the backup data.
7. Adjust the Start and End times of the backup data.
8. Click **APPLY** to save your settings. The Backup Time Information window closes and the main Backup window reopens.
9. Click **START BACKUP** to begin the backup process. Click **STOP BACKUP** to cancel the backup process at anytime.

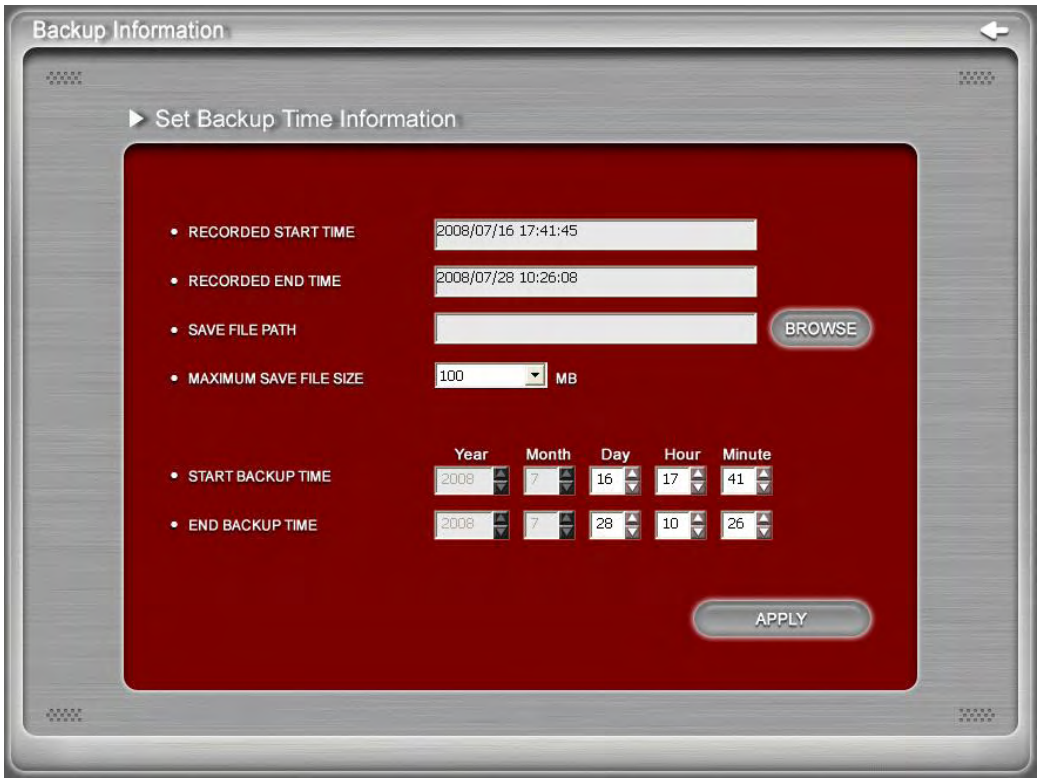


Figure 19.0 Enter Backup Time Information

Note: Wait until the backup process has completely finished. Lorex Backup saves recorded data as an HM4 file.

When you have completed backing up your data, you can view the data using the Lorex Player.

Lorex Player

Once you have archived video data to your computer using Backup (or using a USB flash drive), use Lorex Player to playback this saved video data. Save, edit, and print screen captures from your archived video. You can also convert the archived video files to AVI format, for greater flexibility among media players.

Note: For details on backing up data to a USB flash drive, see page 48. For details on using Backup in Lorex Client, see page 76.



Figure 20.0 Lorex Player Main Window

1. **Main Screen**: Camera channels.
2. **Progress Bar**: During playback, shows the progress of the recorded video.
3. **Displays**: Change the display view from Full-Screen, Quad, and Split-Screen views.
4. **Speed**: Increase the playback speed from 1X, 2X, 4X, 8X, 16X, and 32X.
5. **Playback Controls**: Playback recorded backup video data on your PC:
   - ⏮ Jump to start of recording
   - ◀◀ Slow motion rewind (1/2, 1/4, 1/8, 1/16, 1/32)
   - ◀ Reverse playback
   - ▶ Play

- ⏸ Pause
- ■ Stop
- ⏩ Increase playback speed (2X, 4X, 8X, 16X, 32X)
- ⏭ Jump to end of recording

6. **Delay**: Adjust the speed of rewind
7. **Quit**: Click to exit the program
8. **Time**: Shows the current time in 24-hour clock.
9. **File Operation**: OPEN, EDIT, AVI SAVE, and CHANNEL.
10. **Audio**: Turn Audio On/Off; select audio channels.
11. **Playback Data**: Start, End, and Play time.

Using Lorex Player

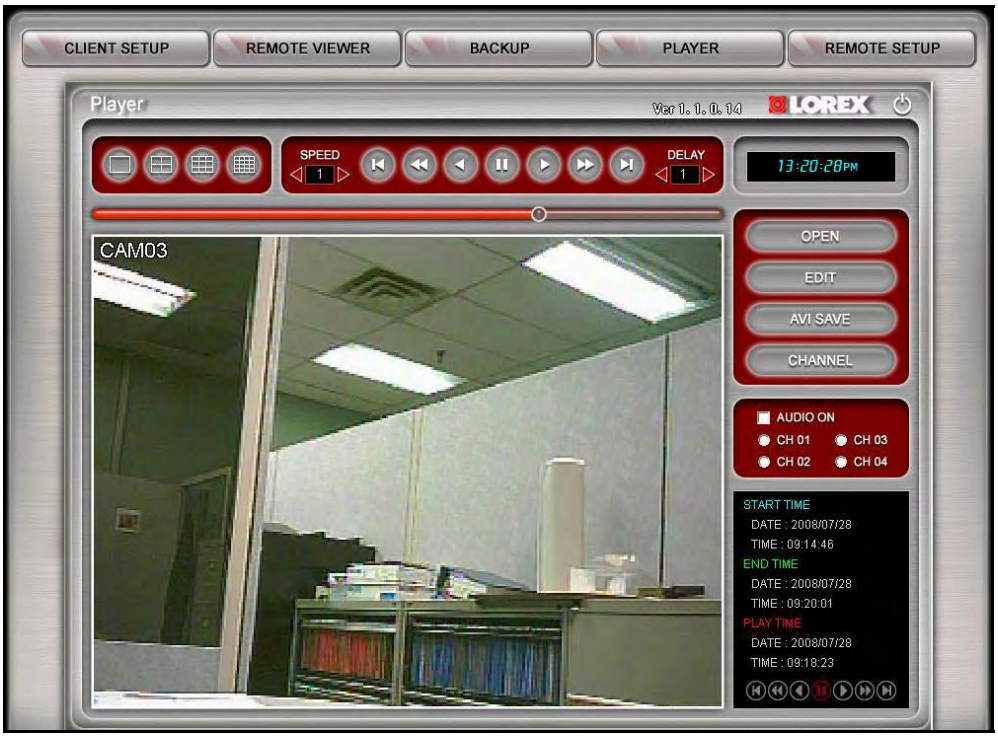


Figure 21.0 Lorex Player main window

Note: For LOW SPEED settings, channels 1~4 appear by default. To view the other channels, click CHANNEL from the Lorex Player Main Menu to open the Channel menu and then click the individual channels.

To view archived video data:

1. From the Lorex Client main window, click **PLAYER**.
2. Click **HIGH SPEED PC** or **LOW SPEED PC** depending on your system. HIGH SPEED PC displays all recorded channels at once; LOW SPEED PC displays up to four channels at once.
3. From the Player window, click **OPEN**.
4. From the Explorer window, select the file HM4 file you want to view and click **Open**.
5. Use the Playback controls to view the file as needed.

Taking a Screen Capture

Once you have opened an archived video file, you can save, edit, and print a screen capture of a segment of the video file.

To take a screen capture:

1. Click **OPEN** and select an HM4 file.
2. Double-click the channel to view it in full screen.
3. Use the playback controls to view the file.



Figure 21.1 Playback controls

4. Select a segment you want to capture and click  .
5. Click **EDIT** to open the Edit toolbar. Use the Edit toolbar to adjust contrast, brightness, sharpness, and softness. For more details, see page 82.



Figure 21.2 Edit toolbar

6. To save the image, click  . The screen capture is saved as a JPG file (`C:\WEB_BACKUP`).
7. To print the image, click  . The default Print dialogue opens.

Using the Edit toolbar

Use the Edit toolbar to adjust the image prior to saving the file as an AVI.



Figure 22.0 Edit toolbar

Contrast:

 Increase contrast.

 Decrease contrast.

Brightness:

 Increase brightness.

 Decrease brightness.

Sharpness:

 Increase sharpness.

Blur:

 Increase softness.

Save:

 Saves a screen capture from the video in JPEG file format to the folder where the player is installed (`C:\WEB_BACKUP`).

Print:

 Prints the screen capture.



Figure 22.1 Click Edit to cancel

To cancel any changes without saving, click **EDIT** from the main Player Window.

Converting Archived Video Files to AVI

You can convert an archived video file as a full-screen AVI file, which allows you to view the data on different media players (e.g. Windows Media Player™, VLC™).

> **Note**: The DivX™ or Xvid codecs are required in order to view AVI files in Windows Media Player™.



Figure 23.0 AVI Save window

To save backup data as AVI:

1. Click **OPEN** and select an HM4 file.
2. Double-click the channel to view it in full screen.
3. Click **AVI SAVE** to open the AVI toolbar.
4. From the AVI Save window, you can configure the file:
   - **CHANNEL** – Select a single channel
   - **FRAMERATE** – Set the frame rate
   - **SIZE** – Set the file size of AVI SAVE
5. Click **START** to save the file as an AVI. The progress bar shows the status of the file. Please wait for the file to finish saving. Click **STOP** to cancel the AVI save at any time. Click **AVI SAVE** from the player window to exit without saving. When the save is finished, an Explorer window opens displaying the file and path – `C:\WEB_BACKUP`

Using the Channel toolbar



Figure 23.1 Channel Toolbar

To use the Channel toolbar:

1. Click **CHANNEL** to open the Channel toolbar.
2. Click the channel numbers to view the backup data in full screen.
3. Click **CHANNEL** again to close the toolbar.

Remote Setup

Remote Setup allows you to configure the settings on your system from a remote location.

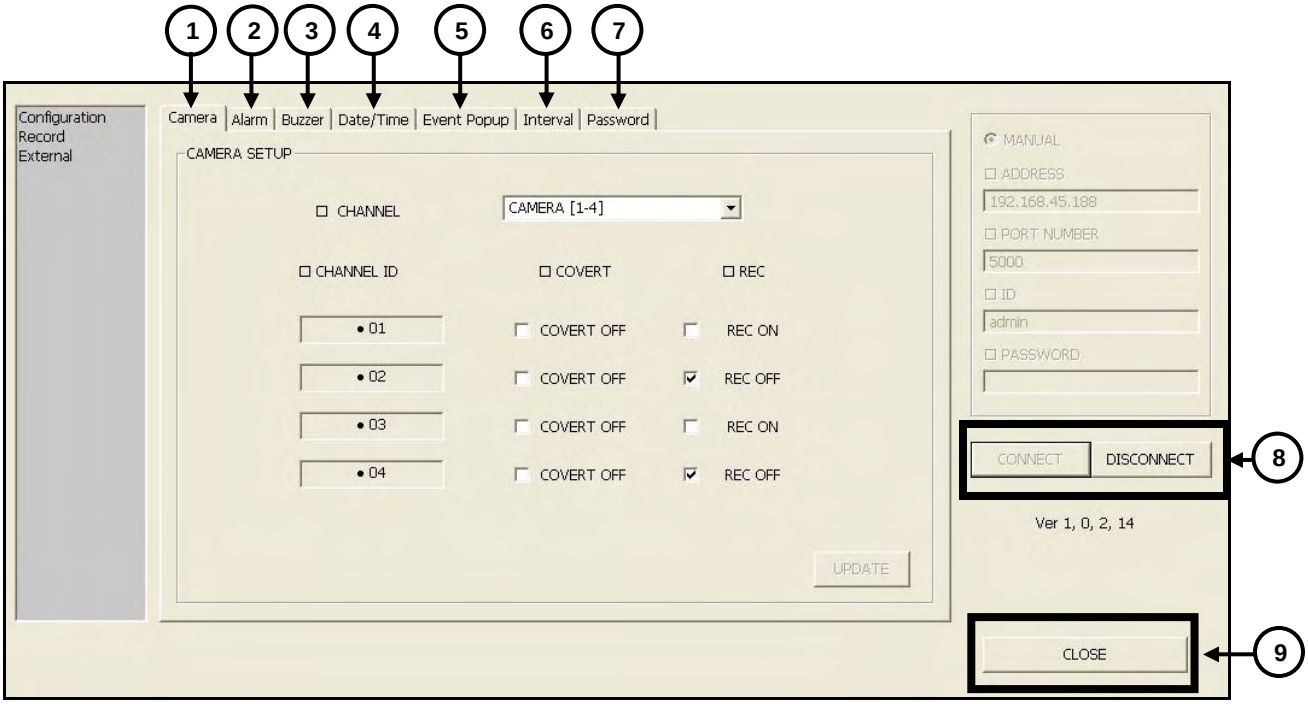


Figure 24.0 Remote Setup main window (connected)

1. **Camera tab**: Configure record and covert settings for each camera.
2. **Alarm tab**: Configure alarm settings for each camera.
3. **Buzzer tab**: Configure buzzer settings.
4. **Date/Time tab**: Set the date and time for the system.
5. **Event Popup tab**: Configure the event popup settings for each camera.
6. **Interval tab**: Configure settings for Sequence Mode and menu timeout.
7. **Password tab**: Manage passwords for all user profiles on the system.

   Note: You must be logged in to Lorex Client as the ADMIN in order to manage passwords.
8. **Connect/Disconnect**: Click Connect to connect to your system; click Disconnect to disconnect to disconnect from your system.
9. **Close**: Click to quit Remote Setup and return to the Lorex Client main window.

Opening Remote Setup

Before using Remote Setup, make sure your system is properly connected to your network and you have entered the correct network information, username, and password in Lorex Client.

To open Remote Setup:

1. Open Lorex Client.
2. From the Lorex Client main window, click **REMOTE SETUP**. The Remote Setup window opens. Your system's IP address, Port number, and User ID (by default, **admin**) are in the text fields (see figure 24.1).

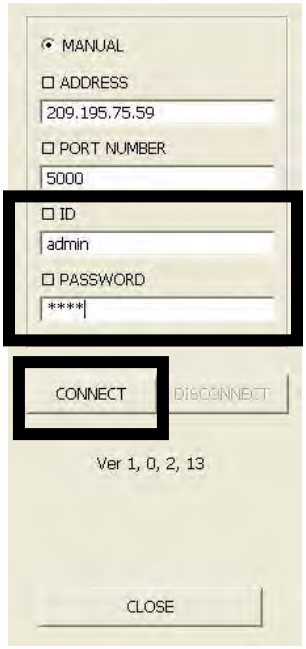


Figure 24.1 Enter username (ID) and password

3. Enter your system's password (by default, leave the password field **blank**) and click **CONNECT.** Allow a few moments for Lorex Client to connect with your system.

Once connected to your system, the Remote Setup window displays menu tabs and options to configure your system settings. Click the tabs to change the settings of your system.



Figure 24.2 Remote Setup main window (connected)

Camera Setup

You can set Record or Covert settings for each camera on your system.

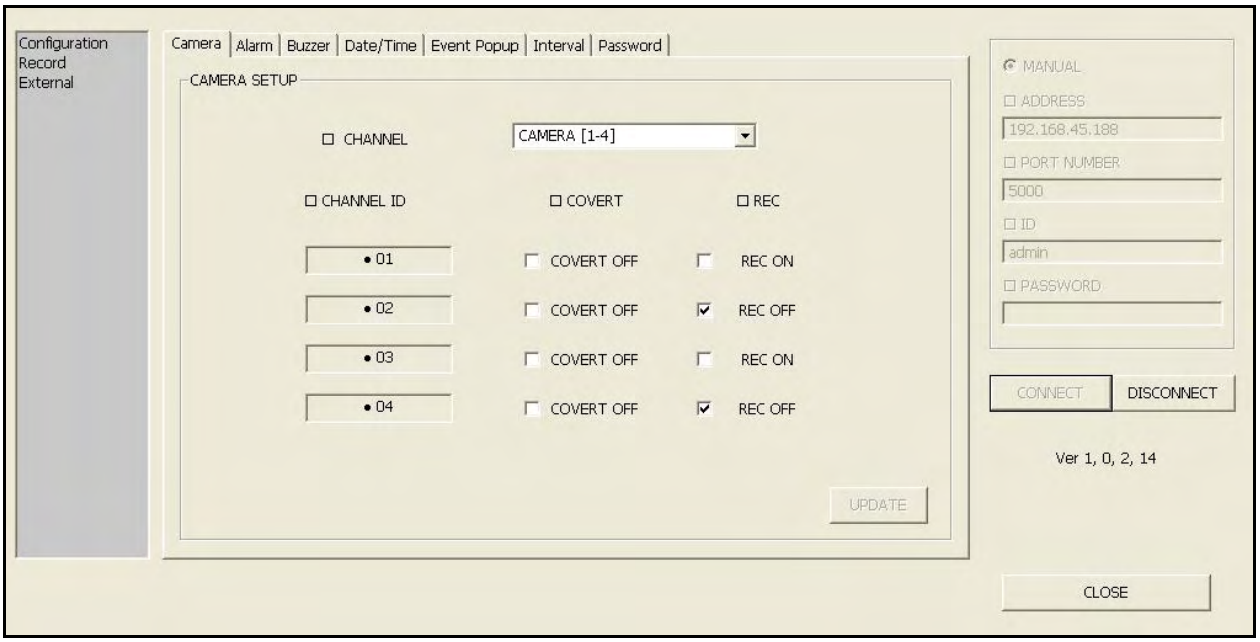


Figure 25.0 Camera Setup

To configure Camera settings:

1. Click the **Camera tab** at the top of the window.
2. Click the CHANNEL drop-down menu to select a group of cameras.
3. Select the boxes under COVERT and REC for the individual cameras.

Note: Select REC OFF if you want to use a camera only for observation. Covert turns the onscreen display of the camera ON/OFF. Covert cameras continue to record, though the image is not displayed onscreen. Use this feature if your system is located in a public area and a camera should not be displayed (e.g. a camera in a cash-count room or above a cash register).

4. Click **UPDATE** to save the settings on the System, or click **CLOSE** to exit without saving and return to the main menu.

Alarm Setup

Set and configure Alarm settings for your System.

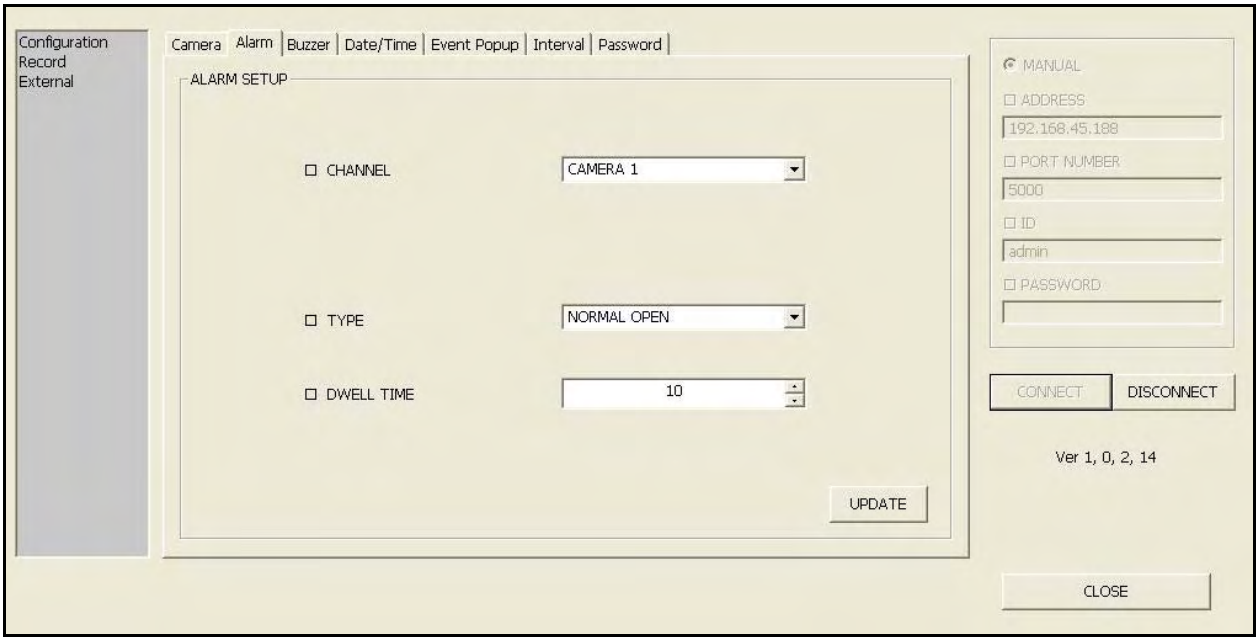


Figure 26.0 Alarm Setup

To configure Alarm settings:

1. Click the **Alarm tab** at the top of the window.
2. Select the individual camera from the CHANNEL drop-down menu.
3. Select the Alarm Type from the TYPE drop-down menu: **NORMAL OPEN**, **NORMAL CLOSED**, or **OFF**.
4. Under DWELL TIME click the ▲▼ to adjust the dwell time. The higher the dwell time, the longer the alarm notification remains on the selected alarm channel.
5. Click **UPDATE** to save the settings on the System, or click **CLOSE** to exit without saving and return to the main menu.

Buzzer Setup

Adjust settings for the Buzzer sounds of your System.

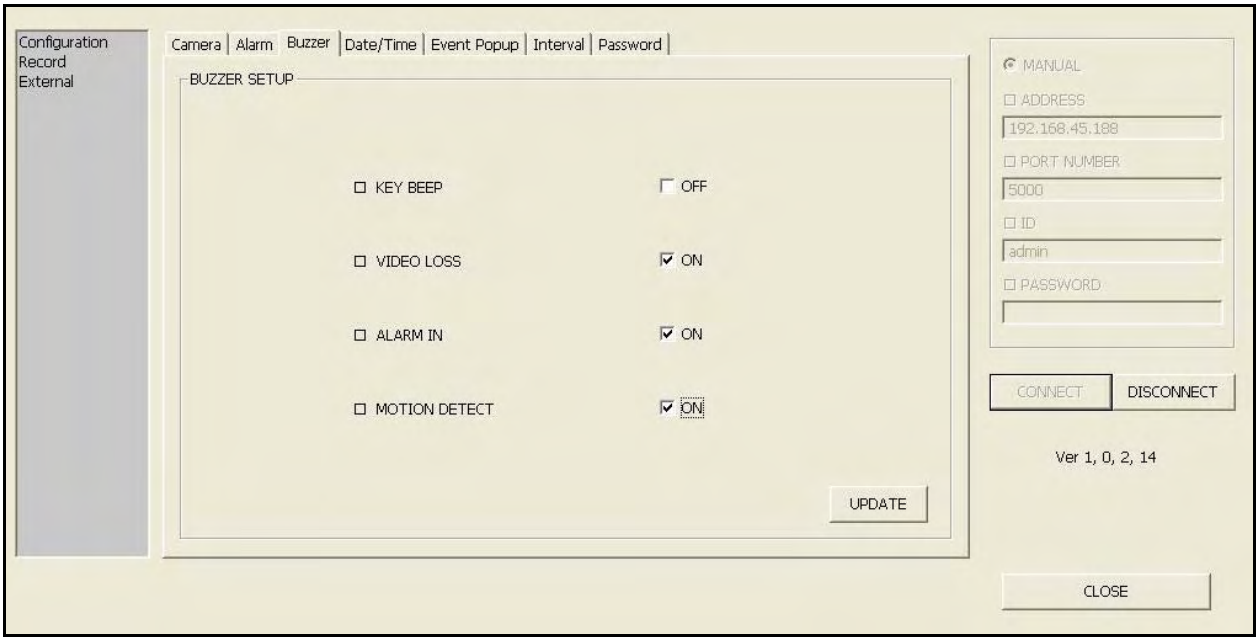


Figure 27.0 Buzzer Setup

To adjust Buzzer settings:

1. Click the **Buzzer tab** at the top of the window.
2. Select the boxes to turn the Buzzer sounds of the system ON/OFF:

   - **KEY BEEP**: Beeps when you click the mouse or press buttons on the remote control.
   - **VIDEO LOSS**: Alarm sound when video signal is lost from a camera.
   - **ALARM IN**: Alarm sound for connected external security alarm.
   - **MOTION DETECT**: Alarm sound whenever motion is detected.

3. Click **UPDATE** to save the settings on the System, or click **CLOSE** to exit without saving and return to the main menu.

Date/Time Setup

Set the date, time, and time zone for the System.

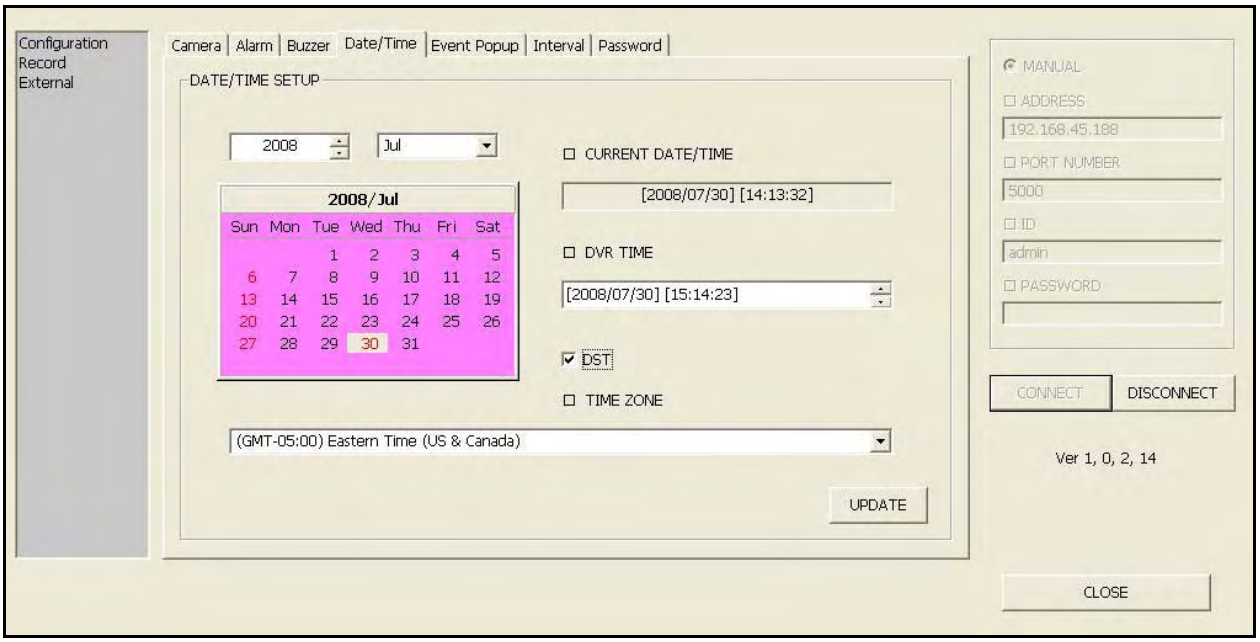


Figure 28.0 Date/Time Setup

To adjust the Date and Time:

1. Click the **Date/Time tab** at the top of the window.
2. Click ▲▼ to select the Year; click the drop-down menu to select the Month.
3. In the Calendar pane, click the Date.
4. Under DVR TIME, select the Hour, Minutes, or Seconds and click ▲▼ to adjust the time. You can also input the time using your keyboard.

Note: You can enter the complete date and time manually by selecting each component of the DVR TIME field (Year/Month/Day; Hour/Minute/Second). Click ▲▼ or use your keyboard to adjust the date and time.

5. Select the **DST box** to enable/disable Daylight Savings Time.
6. Select the time zone for the system from the Time Zone drop-down menu.
7. Click **UPDATE** to save the settings on the System, or click **CLOSE** to exit without saving and return to the main menu.

Event Popup Setup

Configure Event popup notifications for the System.

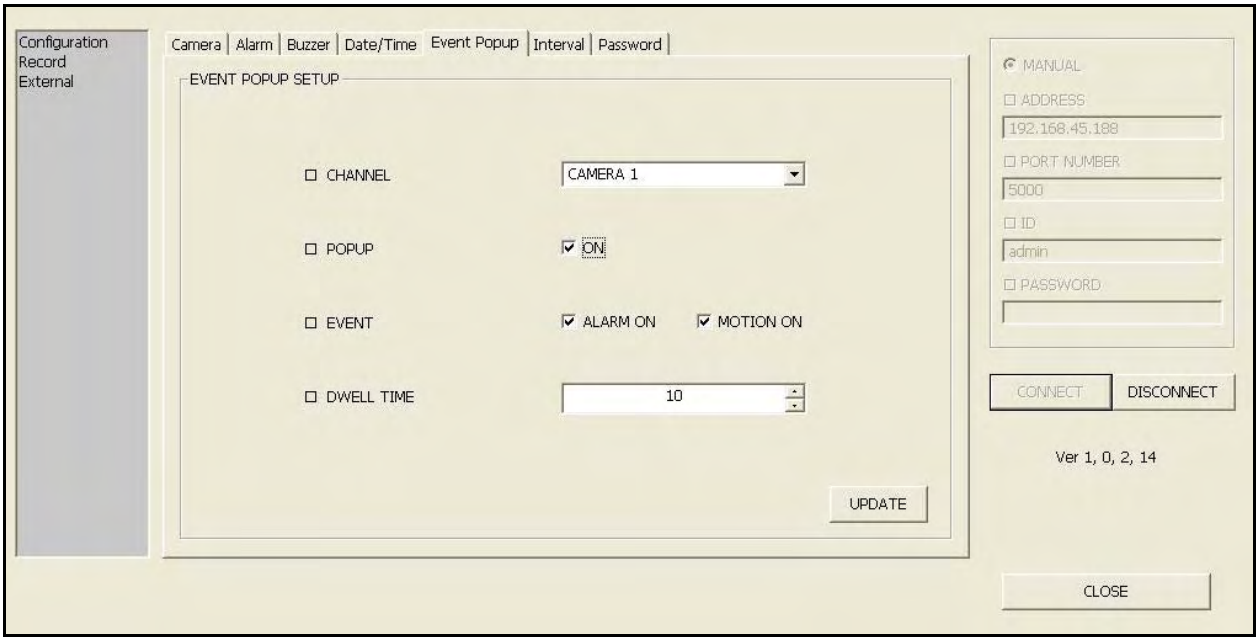


Figure 29.0 Event Popup Setup

To change Event Popup settings:

1. Click the **Event Popup tab** at the top of the window.
2. Select the individual camera from the CHANNEL drop-down menu.
3. Select **ON/OFF box** to enable/disable Popup.
4. Select the **ALARM ON box** to enable/disable an Alarm as an Event; select the **MOTION ON box to** enable/disable Motion as an Event.
5. Click ▲▼ to set the Dwell Time. The higher the dwell time, the longer the Event popup remains in full-screen view
6. Click **UPDATE** to save the settings on the system, or click **CLOSE** to exit without saving and return to the main menu.

Interval Setup

Set the time intervals for Sequence Mode (SEQ), Picture-In-Picture (PIP), and Spot Monitor.

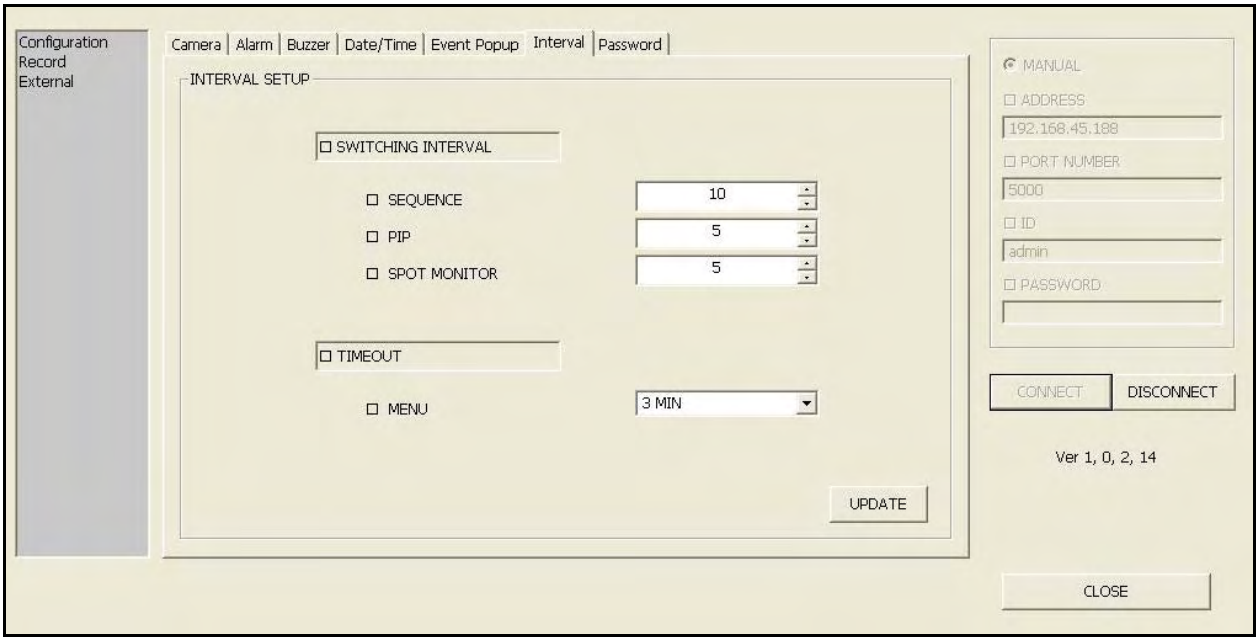


Figure 30.0 Interval Setup

To change Interval settings:

1. Click the **Interval tab** at the top of the window.
2. Under SWITCHING INTERVAL, click ▲▼ to adjust the interval time for SEQUENCE, PIP (Picture-in-Picture), and SPOT MONITOR.
3. Under TIMEOUT, select the Menu Time from the drop-down menus. The higher the time, the longer the System menus will remain on-screen before closing.
4. Click **UPDATE** to save the settings on the system, or click **CLOSE** to exit without saving and return to the main menu.

Password Setup

Set the passwords for the various users of the System. You can have ten users for the System (including Admin).

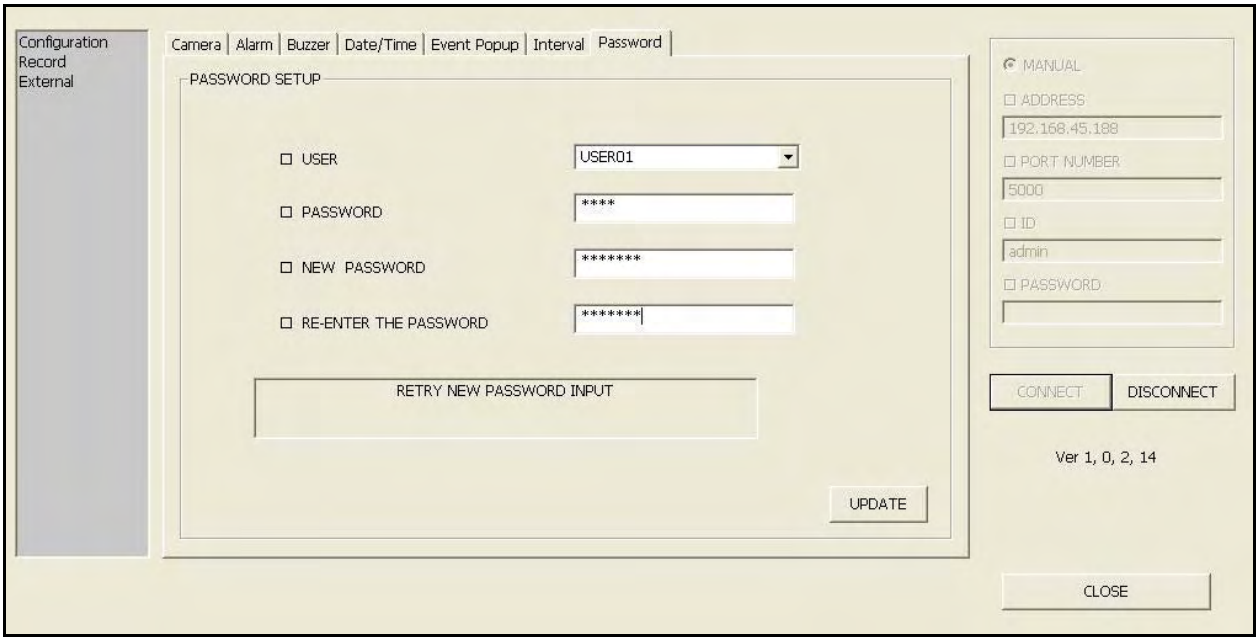


Figure 31.0 Password Setup

To change user passwords:

1. Click the **Password tab** at the top of the window.
2. Select the user from the USER drop-down menu.
3. Enter the **current password** in the PASSWORD text field.
4. Enter a **new password** in the NEW PASSWORD text field.

Note: You must enter a *numeric-only* password with a maximum length of ten digits.

5. Re-enter the new password.
6. Click **UPDATE** to save the settings on the system, or click **CLOSE** to exit without saving and return to the main menu.

Lorex Message Master

Lorex Message Master allows you to display a slide show of digital images and text on your system. You can customize the text and images for advertising your business, or as a screen saver.

Using Lorex Message Master

Use the Lorex Message Master client included on the system's software CD to control and customize the Digital Information Display (DID) on your system.

Note: Prior to using Lorex Message Master, make sure you have enabled Lorex DDNS on your system.

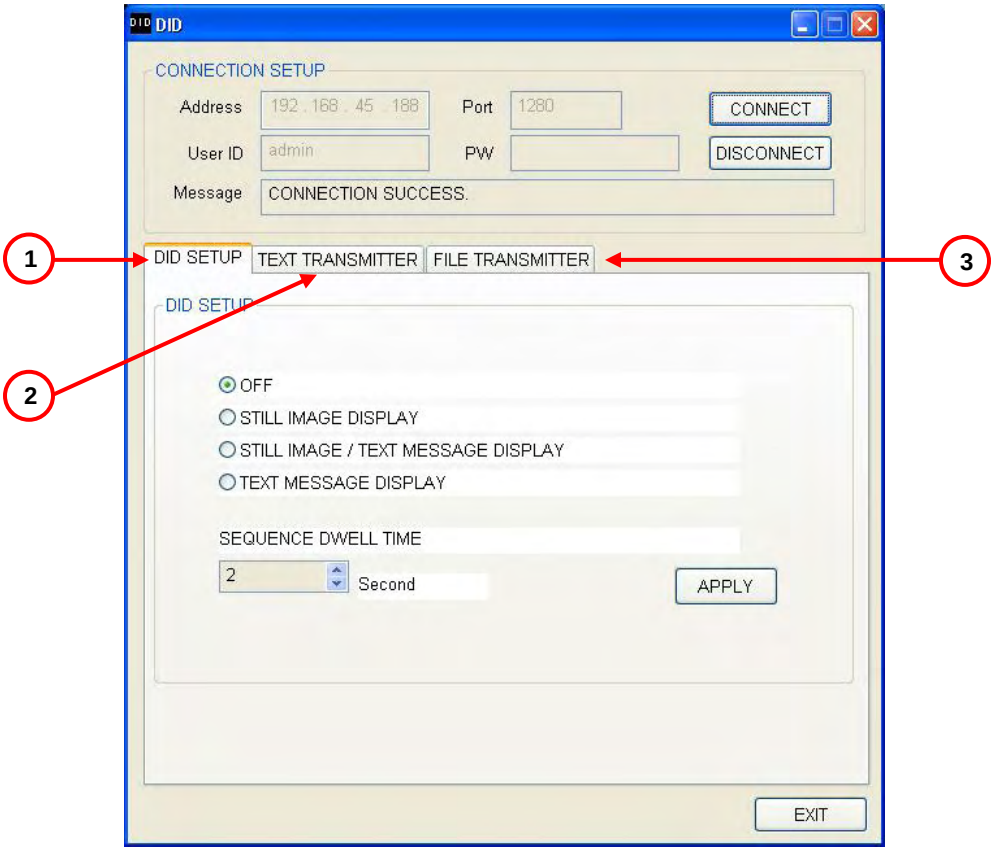


Figure 32.0 Lorex Message Master main window

1. **DID Setup** – Similar to the DID menu in the system, enable/disable still images, text, and adjust dwell time.
2. **Text Transmitter** – Enter Text that can scroll along the bottom of the system screen.

3. **File Transmitter** – Select image files to use on the system as a slide show.

To launch Lorex Message Master:



1. From the Software CD, double-click **LOREXMESSAGEMASTER.exe.** The Lorex Message Master icon appears on your desktop.
2. Enter the IP address of your system, user ID, password, DID port, and then click **CONNECT**.

Note: By default, your user ID is admin; leave the password field **blank**. The default DID port is **1280**; you can change the port to whichever port you would like.

DID Setup

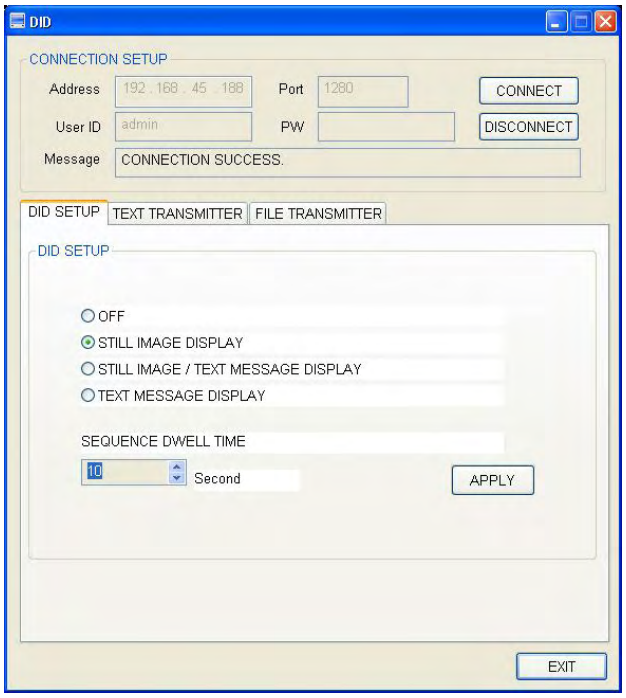


Figure 32.1 Still Image/Text setup

To set Still Images and Text:

a. Click the radio buttons to enable/disable Still Images and Text:

- STILL IMAGE DISPLAY – Images files displayed as a slide show.
- STILL IMAGE / TEXT MESSAGE DISPLAY – Slide show of image files along with text at the bottom of the screen.
- TEXT MESSAGE DISPLAY – Customizable text at the bottom of the screen.

    a. Click the arrows to adjust the dwell time.

    b. The higher the dwell time the longer the text or image remains on screen.

    c. Click **APPLY**.

Text Transmitter

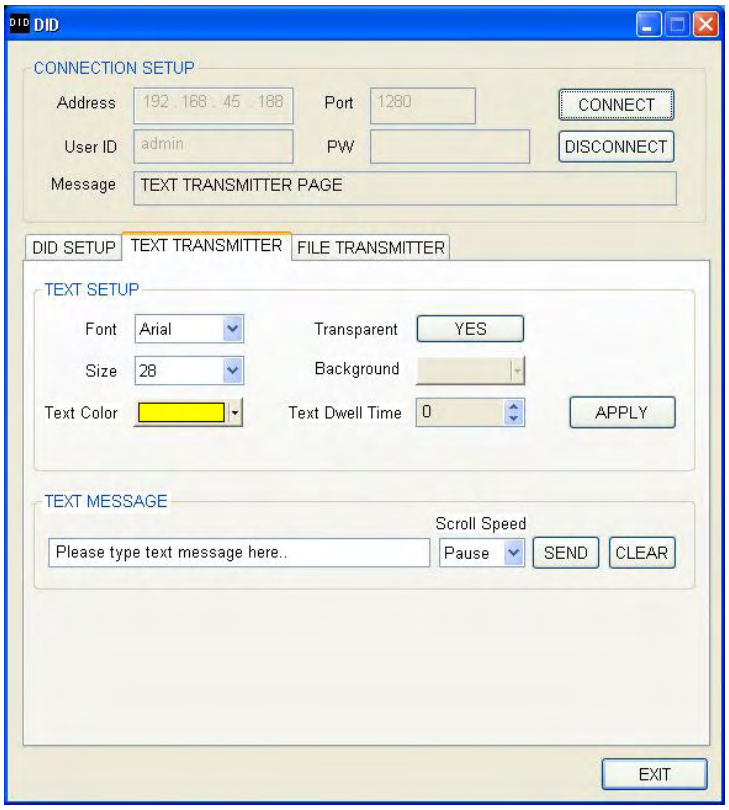


Figure 33.0 Text Transmitter

To customize text:

1. Click the **TEXT TRANSMITTER** tab.
2. Click the drop-down menus to select the font and font size for the text.
3. Under Transparent, click **YES** or **NO**.
   - **YES**: Text appears by itself along the bottom of the system screen.
   - **NO**: Text appears in a bar along the bottom of the system screen. You can select the color of the text bar once Transparency is disabled.
4. Select the text color, adjust the dwell time, and click **APPLY**.
5. In the Text Message field, enter the text you want to appear on the system (40 characters max) and select the scroll speed: **Slow**, **Normal**, **Fast**, and **Pause** to keep the text at the bottom of the system screen.
6. Click **SEND** to send the text to the system and start the moving text display; click **CLEAR** to erase the test from the system.

File Transmitter

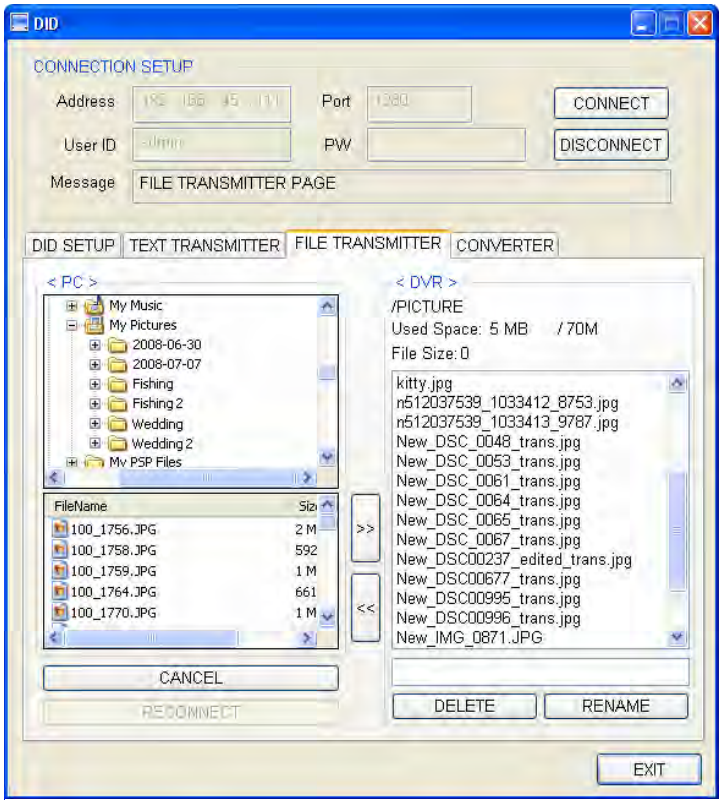


Figure 34.0 File Transmitter

Recommended image resolution for JPEG files:
NTSC
720x480 / 1440x960

PAL
720x576 / 1440x1152

If you transfer a JPEG file that does not conform to the recommended image resolution, it may not fit in the full screen.

To send image files to the system:

1. Click the **FILE TRANSMITTER tab**.
2. Select the drive and folder in the PC pane and the select the individual files in the lower pane.

   Note: Maximum file size is 1.2 MB. If files are larger than 1.2MB, click the CONVERTER tab to convert the file to a smaller size. See page 87.
3. Click 

to send the file to the system.
4. To remove a file from the system, select the file in the DVR column, and click 

.

Note: In the DVR column, you can rename and delete files on the system. The system has a maximum of 70 MB of hard disk space allocated for image files.

Converter

If the image files you wish to send to the system are larger than 1.2MB, you can convert them to a smaller size using the built-in Converter.

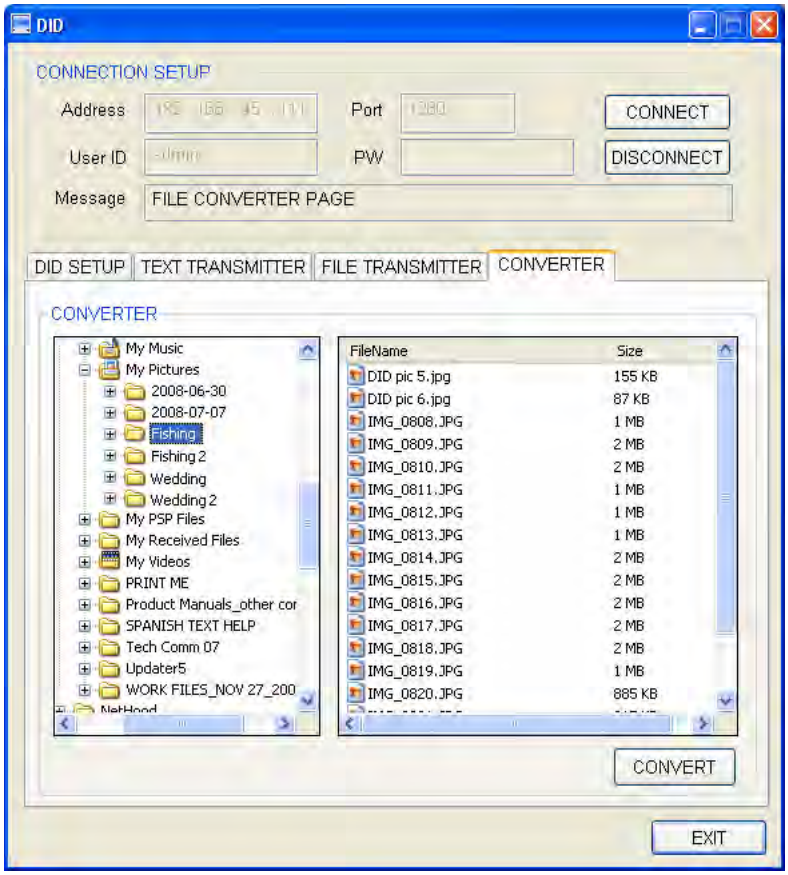


Figure 35.0 File Transmitter

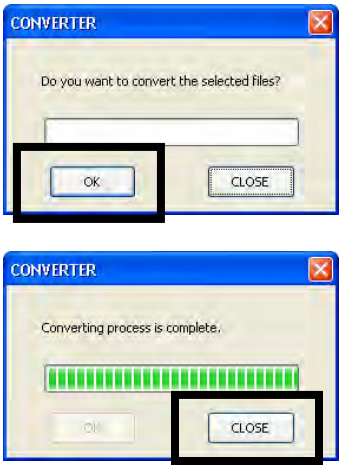


Figure 35.1 Conversion window

To convert images:

1. Click the **CONVERTER tab**.
2. In the CONVERTER pane, select the drive and folder that contains the images.
3. Select the individual file(s) from the right-hand pane. **CTRL+Click** to select multiple files.
4. Click **CONVERT**. In the confirmation screen, click **OK**. Please allow a few moments for the files to convert. When conversion is complete, click **CLOSE**.

Note: The newly converted image files are saved to the same folder as the *original file* with the following naming convention: `NEW_[original_file_name].jpg`

5. Click the **FILE TRANSMITTER tab** to send the newly converted files or click **EXIT** to quit Lorex Message Master.

Appendix A: System Specifications

Monitor

Description	Requirement
LCD	19” Widescreen
LCD Resolution	1400x900
Monitor Display	8-ch: Real time: 240/200 FPS (NTSC/PAL) 16-ch: Real Time: 480/400 FPS (NTSC/PAL)
Image Size	1.5 KB (352x240)
Video inputs	1Vp-p, CVBS, 75ohms, BNC (16-ch) / 8 BNC, 4 DIN (8-ch)
Audio inputs	8-ch: 2 x line-in, RCA 16-ch: 4 x line-in, RCA
Audio out	8-ch: 1 x line-in, RCA 16-ch: 1 x line-in, RCA
Audio	2-way Audio conference (via Network)
Supply Voltage	100VAC-240VAC, 12VDC, 6.67A, 50/60Hz
Power consumption	Approx. 80 watts
Temperature range	14˚F ~ 113˚F (-10˚C ~ 45˚C)
Weight	8.8 kg / 19.5 Lbs
Unit dimensions	18.2” / 462mm X 14.5” / 369mm X 2.5” / 62 mm (W x D x H) (without stand)

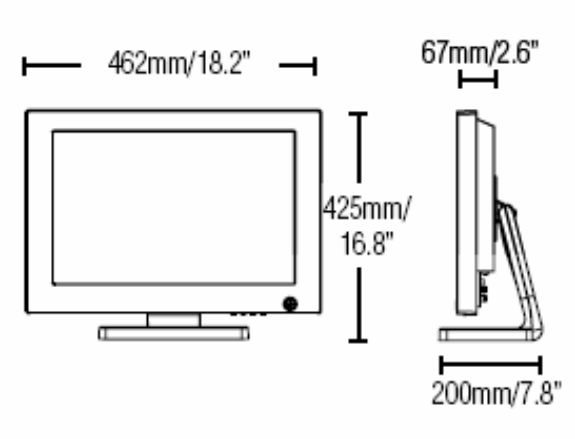
DVR

Description	Requirement
Hard disk capacity	Pre-installed SATA HDD (maximum 1000 GB), Security Certified, 100% duty cycle
Operating System	WinCE 5.0
Secondary Storage	USB Flash drive
Backup file formats	Proprietary
Compression	H.264
Recording speed	352x240: 4-channel 120/100 (NTSC/PAL) 352x240: 8-channel 240/200 (NTSC/PAL) 352x240: 16-channel 480/400 (NTSC/PAL)
Record scheduling	Daily, Weekly, Hourly per 4 channel group
Pre/Post alarm recording	1~5 seconds (pre); 5~99 seconds (post), programmable per 4 channel group
Event search	Up to 12,000 events
Playback	8-ch: Single, Quad, or 8-channel split-screen 16-ch: Single, Quad, or 9 & 16-channel split-screen
Alarm inputs	8 x TTL, programmable as NC/NO
Alarm outputs	1 x Relay with NC/NO contact; 24V DC/600mA
Activity detection	16x12 grid, Sensitivity levels: 4
PTZ control	RS-485 interface
Remote functions	Live view, Search, Configuration, Playback, Backup
Network Speed Control	4 levels (100KB ~ 2.5MB)/sec
Network protocol	TCP/IP, DDNS and Web
Network interface	10/100-Base-TX, RJ-45

System Specifications (cont'd.)

Dimensions

Monitor

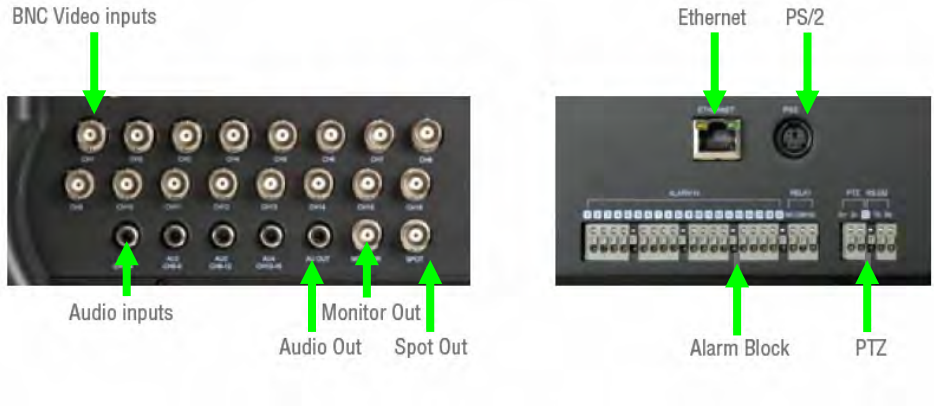


Back Panel

8-channel



16-channel



Appendix B: Listen-In Audio

Listen-in audio allows you to listen to live audio on the System *one* channel at a time.*

Connecting Audio Cameras

DIN only: Connect up to four 6-pin DIN camera to channels 1~4. In the Audio menu, assign audio recording to *one* of these four DIN cameras.

BNC only: Connect *one* audio-capable BNC camera in channels 1~4 and/or *one* audio-capable BNC camera channels 5~8.

DIN & BNC: Connect up to four 6-pin DIN camera to channels 1~4. In the Audio menu, assign audio recording to *one* of these four DIN cameras. Connect *one* audio-capable BNC camera to channels 5~8.

> Note: If you are using DIN and BNC audio cameras, you *must* connect the BNC camera to channels 5~8.

To enable listen-in audio:

1. Connect a **BNC audio camera** or **DIN camera** (Ch. 1~4 only) to the system.
2. Select the audio channel:

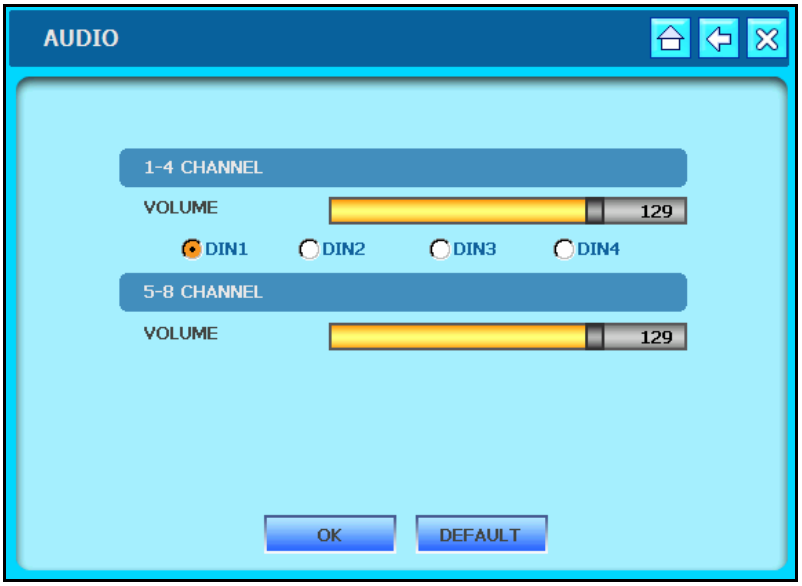
Mouse: From the Function Bar, click 

and then select A1 or A2 or click OFF to turn the internal speaker OFF.

Remote Control: Press the 

button to switch between audio channels 1~2 or turn the internal speaker off.

Front Panel: Press the **AUDIO** button to cycle between audio channels 1~2 or turn the internal speaker OFF.



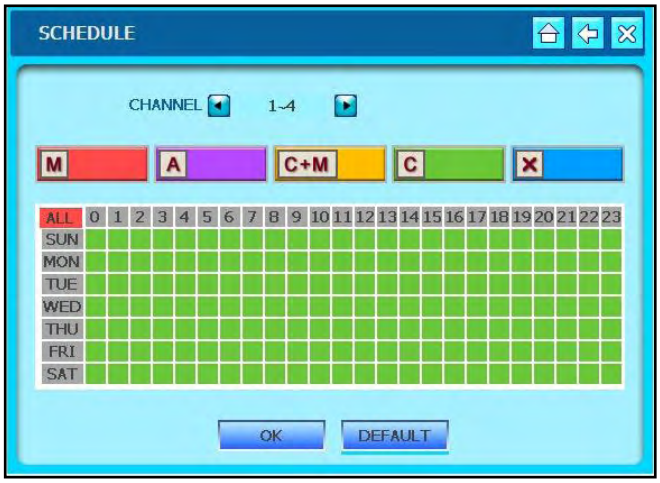
*Audio configuration varies by model:
L19WD400 – 1 Audio Channel; L19WD800 – 2 Audio Channels; L19WD1600 – 4 Audio Channels.

Appendix C: Setting Up Motion Recording

When you first power on the system, it automatically starts recording in continuous mode. You may wish to change this setting to better suit your security needs. One option is to have the cameras only record when they detect motion.

You can set Motion Detection for groups of four cameras according to an hourly schedule. Use the Motion Cell grid to apply motion detection to a specific area of the image.

To set up motion recording:



Mouse:

1. Click the ◄► to select a group of channels (number varies depending on your system).
2. Click 

for Motion Recording.

Click one of the **tiles in the table according to the day and hour(s)** you want to motion recording For example, if you wanted Motion recording from midnight to 6 AM, Monday-Friday:

Click 

.

Click and drag across the table from tile **"MON-0"** to tile **"FRI-5."** The selected area turns purple to indicate Motion recording is enabled from 12 AM to 6 AM, Monday-Friday.

Click **OK** to save your settings.

Continuous & Motion 

This system had an advanced recording feature where both Continuous and Motion recording can be active at the same time:

- The system records continuously, but when it detects motion, it displays an "M" on the pertinent channel.
- The event is logged as Motion in the system archive.
- This is useful in situations where you want continuous recording, but also want to track events for convenient and faster searching.

Using the Motion Cells

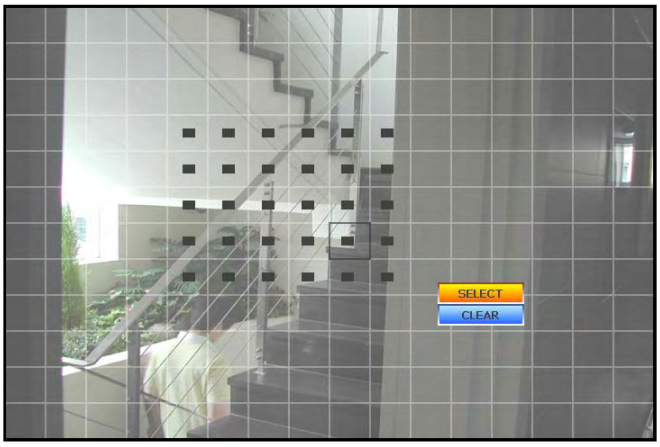
You can further configure Motion Detection to have the system record only when movement is detected in a specific area of the camera image. Use this feature to mask certain areas, such as windows and doors.

You can also set the motion cells to remove certain areas from detection, such as a heavy traffic area, or a constantly moving piece of machinery.

To configure Motion Cell Setup:

Mouse:

1. Right-click on the screen to open **Motion Cell grid.**
2. Click and drag across the screen to set a specific motion sensitive area. **Select** and **Clear** buttons pop-up.

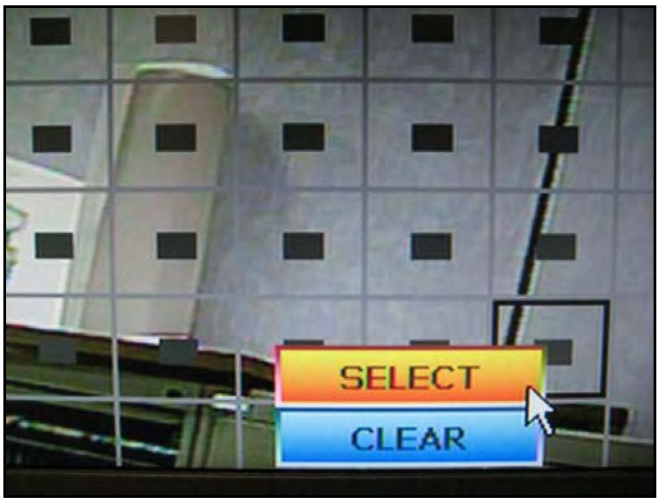


Note: Active cells are *clear*; inactive cells are solid *gray*.

Small gray squares indicate selected squares when clicking & dragging.

To verify that motion is active, move your hand in front of the camera – the active cells turn green.

3. Click **CLEAR** to disable motion sensitivity to the selected cells. Disabled cells turn solid gray.
4. If cells are disabled, click and drag on cells you wish to activate and click **SELECT**.
5. Right-click anywhere on the screen to return to the MOTIOM SETUP MENU.
6. Click **OK** to save your settings, or click **DEFAULT** to restore factory defaults.



Appendix D: Using the Storage Calculator

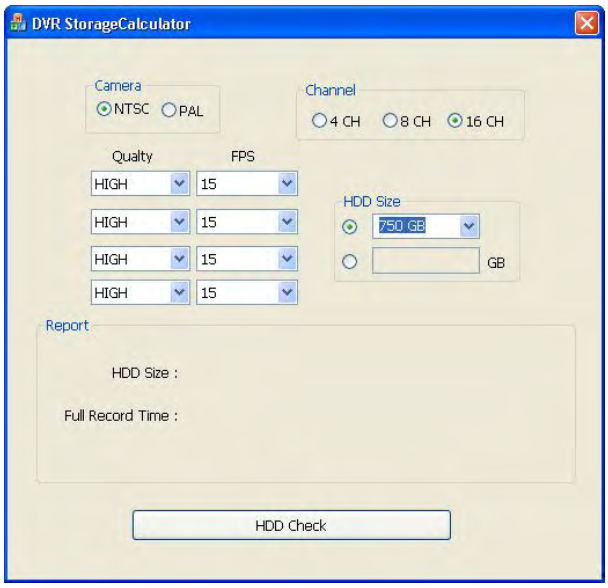
Use the Storage Calculator included on the Software CD to determine the amount of recording time available on your Hard Disk, according the System Record Settings.

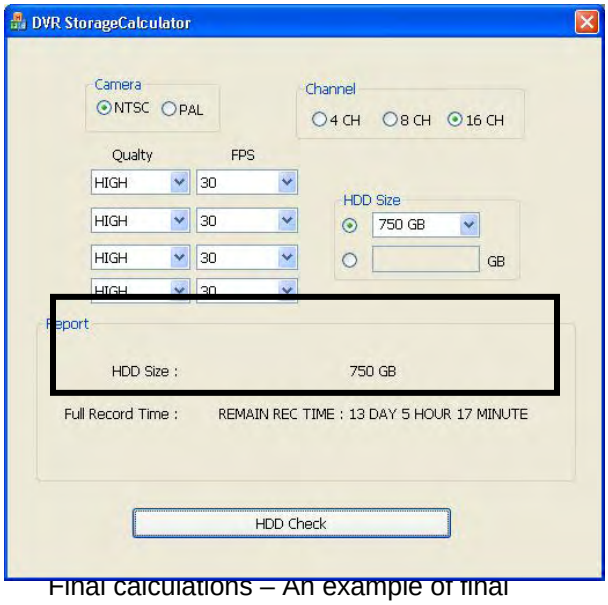
To use the Storage Calculator:

1. Double-click **Storage Calc.exe**
2. Under Camera, select **NTSC** or **PAL**.
3. Depending on your system, select **4 CH**, **8 CH**, or **16 CH***.
4. Under the Quality drop-down menu, select **NORMAL**, **HIGH**, or **HIGHEST**. Under the FPS drop-down menu, select **3**, **5**, **10**, **15**, or **30** frames-per-second.
5. Under the HDD Size drop-down menu, select the hard disk size of your system.

Note: If your hard drive size is not listed, select the radio button below the drop down menu and enter your hard drive size manually.

6. Click **HDD Check**. The Storage Calculator displays record time available (day/hour/minute) on your best according to the entered values. Adjust the values to find the best configuration to suit your security needs.





Final calculations – An example of final storage calculations.

*16-channels only on L19WD1600 Series

Appendix E: Replacing the Hard Drive

The system comes with a pre-installed, security grade, SATA hard drive. You can expand your system's storage capacity by replacing the built-in HDD with a larger SATA hard drive (maximum 1000 GB*).

Note: Before changing the hard drive, make sure to power off the system by disconnecting the power cable from the system.

Removing the installed hard drive

To remove the installed hard drive:



1. Remove the screws from the hard drive cover on the back of the system.
2. Carefully remove the hard drive from the system.
3. Disconnect the cable from the hard drive.
4. Remove the four mounting screws and carefully slide the hard drive from the metal casing.

Installing the new hard drive

To install the new hard drive:

1. Carefully slide the new hard drive into the metal casing (label side down), and reattach the four mounting screws.
2. Connect the cable to the hard drive. Make sure that the cable is securely connected within the system and to the hard drive.
3. Carefully put the hard drive in the unit. Gently slide the hard drive in place and line up the holes for the screws.
4. Reattach the screws firmly, locking the hard drive in place. The hard drive should be flush with the rear panel of the system.
5. Reconnect the power cable to the system.

Formatting the hard drive

You must format the new hard drive prior to recording.

If a new hard drive is detected, the system will prompt you to format the drive. If you do not format the hard drive, it will not function properly with the system.

Note: If you format the hard drive to use in your system, it can no longer be used in a PC.

*1000 Gigabytes (GB) = 1 Terabyte (TB).

Appendix F: Connecting a Spot-Out Monitor

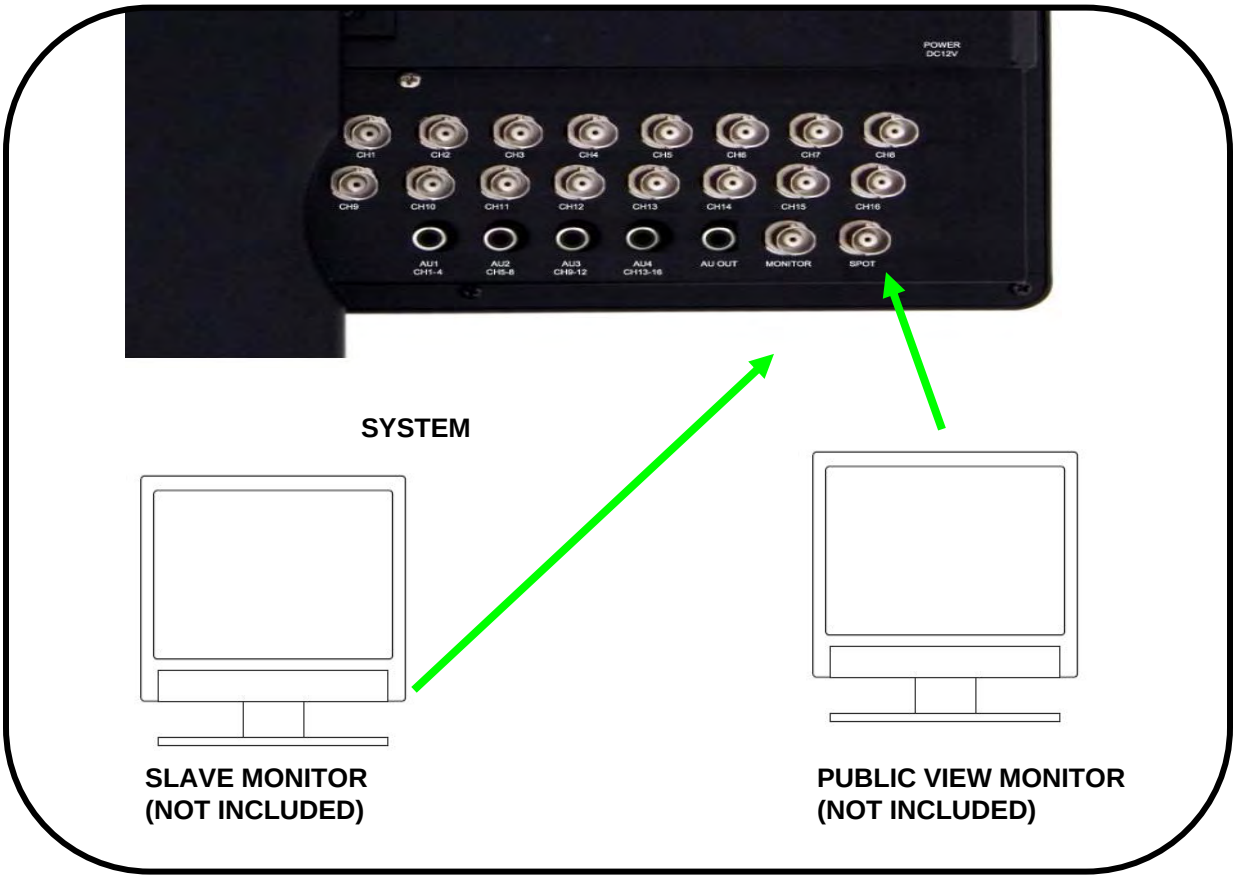
Use the Spot port on the rear panel of the system to connect a Spot Out Monitor (not included). Spot Out displays the camera channels in sequence. You can change the dwell time for the time interval in the Interval menu. This is useful for a monitor in public view: you can make people aware that they are being watched. You can also use the spot-out monitor to display announcements or advertising. *See the* Lorex Client Software Manual *for more details.*

To change time intervals:

1. From the System Main Menu, click  and then click **INTERVAL**.
2. Under Switching Interval, click ◄► to adjust the dwell time (in seconds) for the Spot Monitor. The higher the time, the longer the image stays on screen.
3. Click **OK** to save your settings, or **DEFAULT** to restore factory defaults.

Connecting an external monitor

Use the Monitor port on the rear panel of the system to connect an external monitor. Monitor-out mirrors the entire screen image of your system. This is useful if you need to monitor the system from a second location (e.g. a back office).



Appendix G: Connecting Motion / Alarm Device

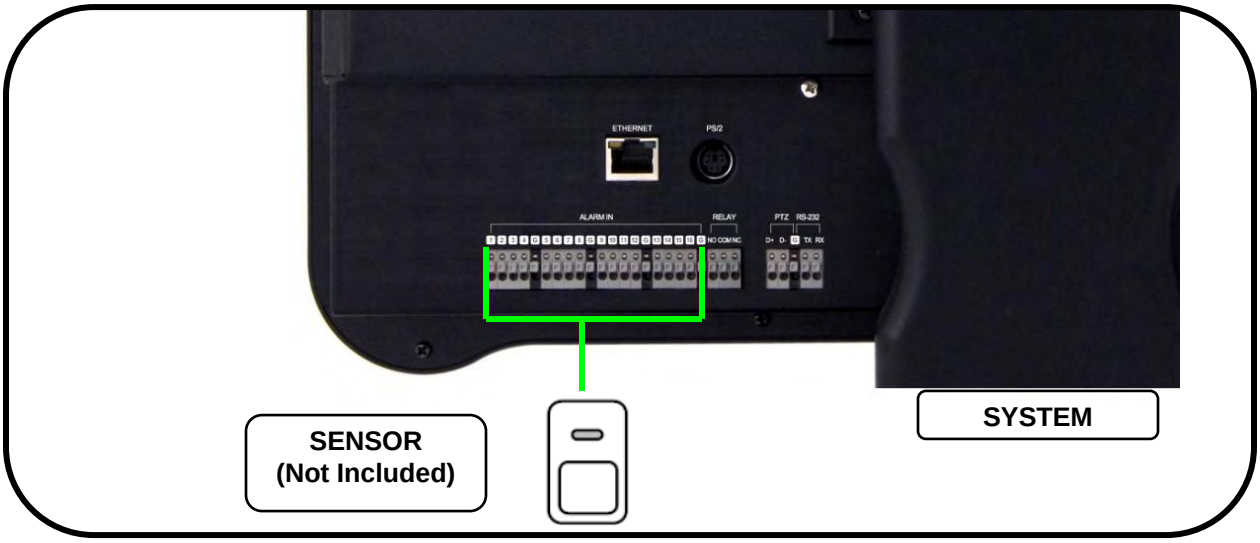
You can enable Motion Detection and Alarm control from the System Main Menu. You can also connect additional motion sensor devices to the system (i.e. motion sensors, door/window sensors). Use a motion detector or sensor to send a signal to the system to begin camera viewing and recording on the matching camera channel (when enabled in the Menu)

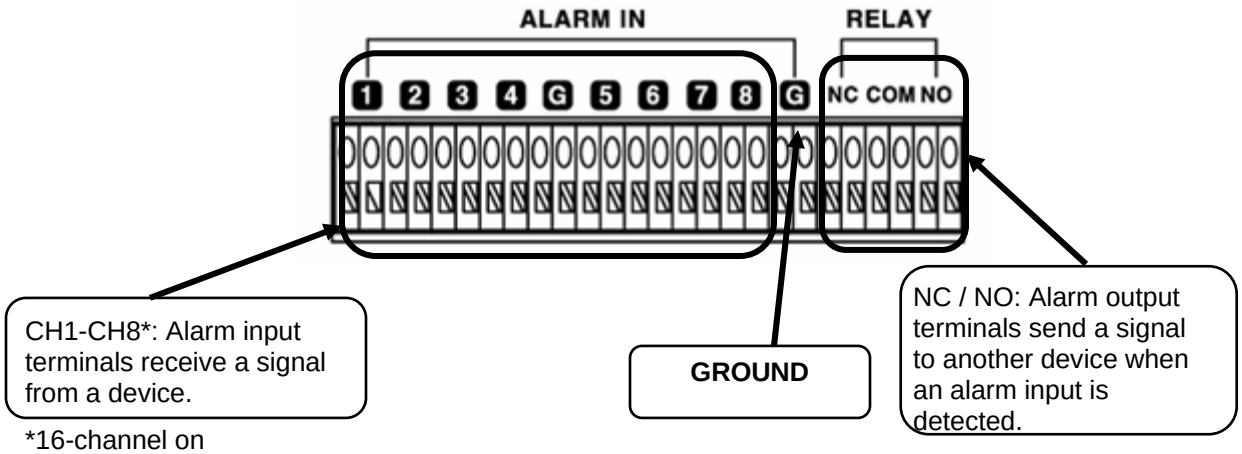
For example, a window sensor unit is installed on Alarm Block port #4. When this sensor activates, the camera on CH4 will also become active (if enabled in the Alarm menu on the system).

Installing a Sensor

To connect an external alarm sensor to the system:

1. Connect the **Ground Cable** to the desired Channel number **– port** on the rear panel.
2. Connect the **Signal Cable** to the desired Channel number **+ port** on the rear panel.
3. From the System Main Menu, click  and then click **ALARM** to configure alarm recording.





*16-channel on L19WD1600 Series.

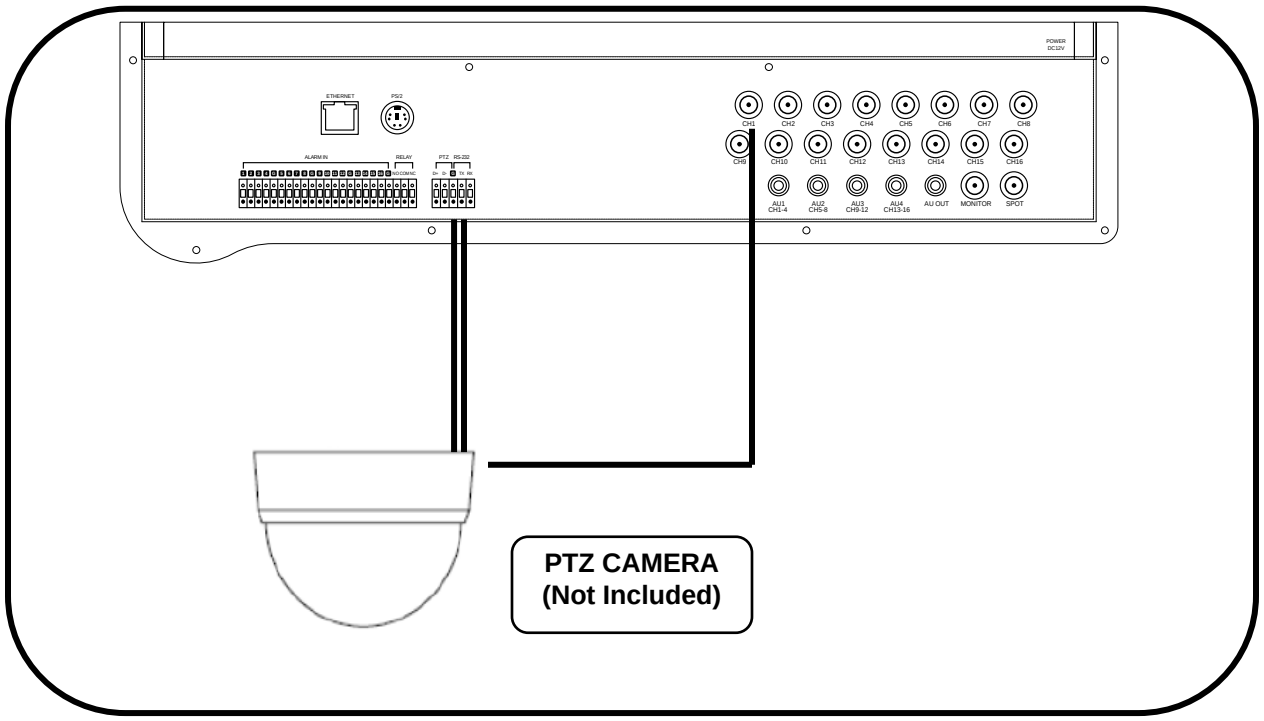
Appendix H: Connecting PTZ Cameras

You can connect PTZ cameras (not included) to the PTZ Control Block on the rear panel of the system. You can configure the PTZ cameras in the Camera Menu of the system. Additional PTZ cameras are available at www.lorexcctv.com

Installing a PTZ Camera:

1. Connect the **Transmit Cable** to the **TX port** of the **PTZ** block on the rear panel.
2. Connect the **Receive Cable** to the **RX port** of the **PTZ** block on the rear panel.
3. Connect the PTZ camera to a **BNC Channel**.
4. From the System Main Menu, click  and then click **PTZ** to configure the camera.

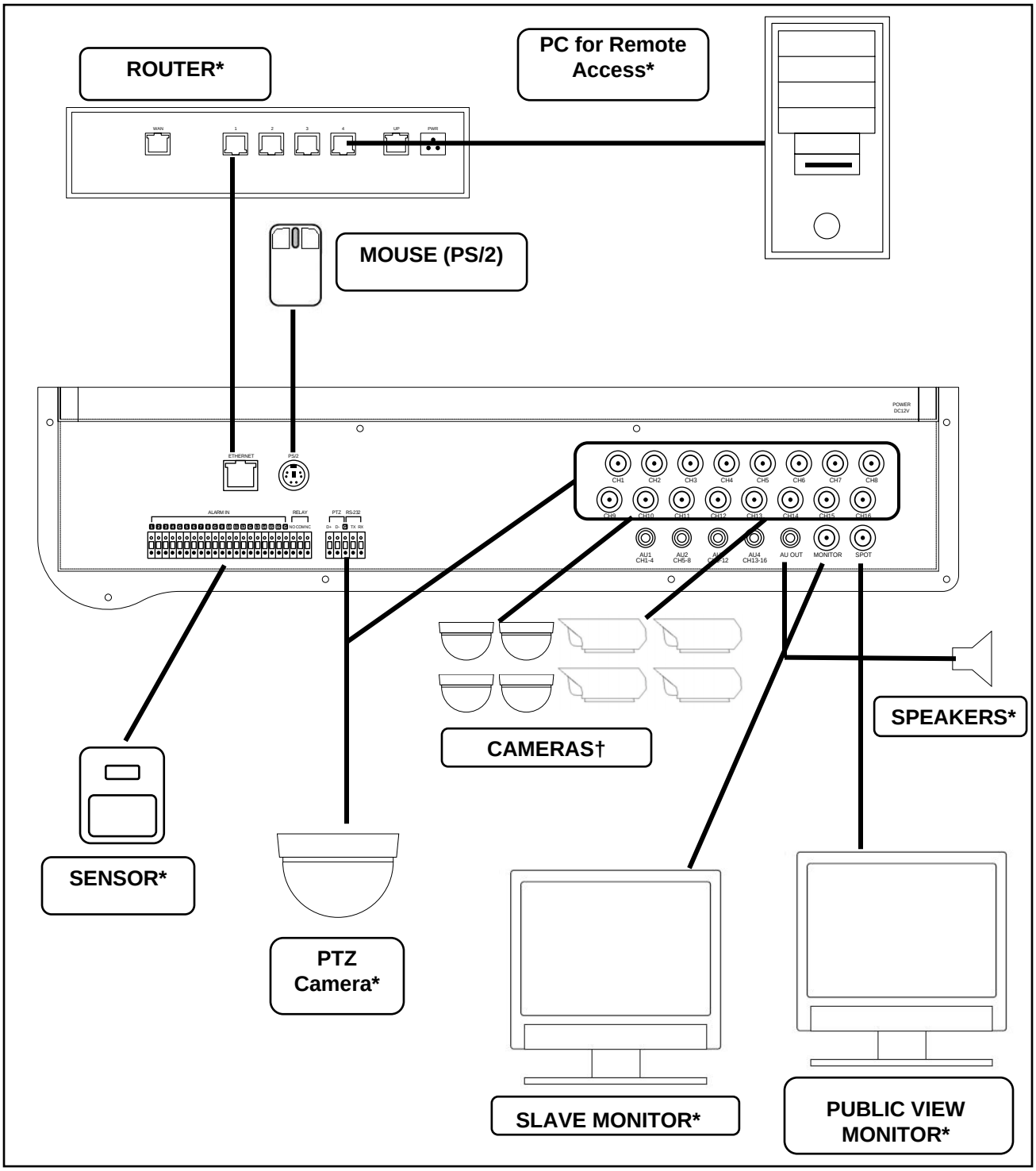
Note: The PTZ camera settings depend on the type of PTZ camera. Please refer to the specific camera manual for your brand and model of PTZ camera.



Appendix I: Full Connectivity Diagram

The following diagram outlines the slate of connections available for the system:

*Not included with the system.
†Configuration varies by model.



Appendix J: Managing Users

There are three types of users available on the system: *ADMIN*, *MANAGER*, and *USER*. There are 10 user profiles available on the system: ADMIN, MANAGER1~3, and USER1~6.

Note: For a list of default password, see page 39.

ADMIN

The default user of the system is ADMIN (administrator). The ADMIN has full access and authority on the system. The ADMIN can set authorities and limit access to system options for MANAGER and USER.

Suggested use: Use the ADMIN profile if only one person will be using your system – especially in home or personal use; you can use ADMIN to log in and use all the functions of the system.

MANAGER (MANAGER1~3)

By default, the MANAGER has all the authorities of the ADMIN except for HDD Management. If you log in to the system as a MANAGER, you cannot access HDD Management from the System Main Menu. Only the ADMIN can change what authorities are available to the MANAGER.

Suggested use: Use the MANAGER profile if 2~3 people will be actively using your system and you want to limit access to only a few functions of the system.

USER (USER1~6)

By default, the USER has no authorities to change any settings or options on the system. The USER can only view live video and change display views.

Suggested use: The USER profile is recommended if several people will be using your system, but do not want them adjusting system settings or functions. The USER profile is well suited to a small business environment with multiple operators using the system at different times.

Please keep in mind that the ADMIN can customize the authorities for the MANAGER and USER profiles. Change the authorities for these profiles to best suit your security needs. For more details on User Authorities, see page 34.

Frequently Asked Questions

Q: What is my password?

A: By default, leave the ADMIN password **blank**. It is highly recommended to set a secure password after initial login. For a complete list of default passwords for all MANAGER and USER profiles, see page 34.

Q: How do I shut down the system?

A: Disconnect the power cable from the rear panel of the system. Wait a few seconds, and then reconnect the power cable.

Q. Can I turn the monitor off?

A: Yes. Hold the **MENU button** on the front panel for 3 seconds to turn off the monitor. Press the **MENU button** on the front panel again to turn the monitor back on. You can also set the monitor to turn off and on automatically using the Screen Saver function of the system. For more details see page 39.

Q. Do I need a particular brand of USB flash drive for the system?

A: No. The system is compatible with most brands of USB flash drives (up to 8GB).

Q. Can I connect an external USB hard drive or CD/DVD-RW drive to the system?

A. No. External USB hard drives and USB CD/DVD-RW drives are not compatible with the system.

Q. I want to backup more than 8GB of data, how can I do this if I can only connect a USB flash drive to the system?

A. You need to use the Lorex Client software included on the software CD. Use the included Ethernet cable to connect your system to your network router or switch. Use the Backup function in Lorex Client to backup recorded video data from your system to your computer. For more details on connecting your system to your network, see Appendix C. For more details on setting up and using Lorex Client, see page 54.

Q: I have connected my system to my network and installed Lorex Client; what do I do next?

A: Click **CLIENT SETUP** to enter your system's IP address or DDNS address into Lorex Client, along with your system username and password. Once your information has been saved, click **REMOTE VIEWER** to connect to your system and view live video from your system; click **BACKUP** to backup recorded data from your system to your computer; click **PLAYER** to view this backed up data in Lorex Client; click **REMOTE SETUP** to change settings on your system using Lorex Client. For more details on setting up and using Lorex Client, see page 54.

Q: What is the Digital Information Display (DID)?

A: The DID can display a slide show of images (JPG files) or text. You can send images and text from a remote location using Lorex Message Master Software. The DID can be used as a small business advertising solution. You could also use the DID to conceal the fact that your system is a security monitor.

- If you have a small business and your system is within public view, use the DID to display images and text related to your business, such as store information or advertising.
- For home or personal use, you can use the DID to display a slideshow of images.

For more details on using the Digital Information Display, see page 39.

Q: How do I put images on my system to use with the DID?

A: You can load images to your system using Lorex Message Master included on the software CD. Images should be no larger than 1.2 MB.

For more details on using Lorex Message Master, see page 83.

Revision 1.0

LOREX PRODUCT LIMITED WARRANTY

Lorex warrants, to the original retail purchaser only (the "Purchaser"), that this item (the "Product") if properly used and installed, and where applicable, the CD-ROM on which the accompanying software is provided, is free from manufacturing defects in material and workmanship, provided the Product is used in normal conditions and is installed and used in strict accordance with the instructions contained.
This warranty shall be for the following warranty periods (the "Warranty Period"), commencing on the date the Purchaser buys the Product at retail in an unused condition.

Parts and Labor: *1 year (Warranted parts do not include Bulbs, LED's and Batteries)*

Lorex's obligations under this warranty shall be limited to
• The repair and or replacement of the product by means of hardware and/or software (at option of Lorex);
• The replacement of any warranted parts found by Lorex to be defective in the Product or, in Lorex's sole discretion, the replacement of the Product found be Lorex to be defective.
• If Lorex is unable to repair or replace the Product or CD-ROM, refund the then-current value of the Product.
Any replacement parts furnished by Lorex in connection with this warranty shall be warranted to the Purchaser for a period equal to the un expired portion of Warranty Period for the Product.

Warranty Exclusions
This warranty does not apply to Bulbs, LED's and Batteries supplied with or forming part of the product.
This warranty is invalidated if other than Lorex accessories are or have been used in or in connection with the Product or in any modification or repair is made to the Product by other than a service depot authorized by Lorex.

This warranty does not apply to defects or damages arising by use of the Product in other than normal (including normal atmospheric, moisture and humidity) conditions or by installation or use of the Product other than in strict accordance with the instructions contained in the Product's Owner's Manual.
This warranty does not apply to defects in or damages to the Product caused by (i) negligent use of the Product, (ii) misuse, abuse, neglect, alteration, repair or improper installation of the Product, (iii) electrical short circuits or transients, (iv) Purchaser usage not in accordance with product installation, (v) use of replacement parts not supplied by Lorex (vi) improper Product maintenance, or (viii) accident, fire, flood or other Acts of God.

This warranty does not cover the performance or functionality of any computer software included in the package with the Product. This warranty only covers defects in the CD-ROM media such as a broken or a defect in the CD-ROM that would prevent the CD-ROM from being read by your personal computer's CD-ROM drive. Lorex makes no warranty that the software provided with the Product will function without interruption or otherwise be free of anomalies, errors or 'Bugs'. Lorex makes no warranty with regard to any software provided with the Product unless specifically set forth otherwise in a license agreement accompanying such software. This warranty does not cover any costs relating to removal or replacement of any Product, CD-ROM, or software installed on your computer.

Lorex reserves the right to make changes in design or to make additions to or improvements in its products without incurring any obligation to modify any product which has already been manufactured. Lorex will make every effort to provide updates and fixes to its software via its website. This warranty does not cover any alteration or damage to any other software that may be or may become resident on the users system as a result of installing the software provided. This warranty is in lieu of other warranties, express or implied, and Lorex neither assumes nor authorizes any person to assume for it any other obligation or liability in correction with the sale or service of the Product. In no event shall Lorex be liable for any special or consequential damages arising from the use of the Product or arising from the malfunctioning or non-functioning of the Product, or for any delay in the performance of this warranty due to any cause beyond its control.

This warranty shall not apply to the appearance or accessory items including, but not limited to cabinets, cabinet parts, knobs etc., and the uncrating, setup, installation or the removal and reinstallation of products after repair.

Lorex does not make any claims or warranties of any kind whatsoever regarding the Product's potential, ability or effectiveness to prevent minimize, or in any way affect personal or property damage or injury. Lorex is not responsible for any personal damage, loss or theft related to the Product or to its use for any harm, whether physical or mental related thereto. Any and all claims or statements, whether written or verbal, by salespeople, retailers, dealers or distributors to the contrary are not authorized by Lorex, and do not affect this provision of this warranty.

Lorex's responsibility under this, or any other warranty, implied or expressed, is limited to repair, replacement or refund, as set forth above. These remedies are the sole and exclusive remedies for any breach of warranty. Lorex is not responsible for direct, special, incidental, or consequential damages resulting from any breach of warranty or under any other legal theory including but not limited to, loss profits, downtime, goodwill, damage to or replacement of equipment and property and any costs of recovering, reprogramming or reproducing any program or data stored in or used with a system containing the Product CD-ROM or accompanying software.

Lorex does not warrant that the software will operate with any other software except that which is indicated. Lorex cannot be responsible for characteristics of third party hardware or software which may effect the operation of the software included.

The purchaser may have other rights under state, provincial, or federal laws and where the whole or part of any item of this warranty is prohibited by such laws, it shall be deemed null and void, but the remainder of the warranty shall remain in effect.
All expressed and implied warranties are limited in duration to the limited warranty period. No warranties apply after that period. Some states do not allow limitation on how long an implied warranty lasts, so this limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above warranty may not apply to you. This limited warranty gives you specific legal rights and you may also have other rights that vary from state to state.

Obtaining Service

In order to obtain service, please make sure that you have registered your product on-line (www.lorexcctv.com) in the warranty registration section. Should the Product require service under this warranty, the Purchaser must provide Lorex with a copy of his/ her original, dated bill of sale; receipt or invoice, failing which Lorex will not perform any of its obligations under this warranty. If you return the Product and/or CD-ROM to Lorex, you must assume the risk of damage or loss during shipment. You must use the original packaging or the equivalent, and you must pay postage.
To claim on this warranty, proceed with the following steps.

1 Pack the Product in a well-padded sturdy carton.
2. i). If the unit was purchased in the United States proceed as follows:
a. Please contact our customer service department to obtain a return authorization number.
b. Return the unit to: Lorex Service Center
2375 Hadley Rd, Plainfield, IN 46168

ii). If the unit was purchased in Canada proceed as follows:
a. Please contact our customer service department to obtain a return authorization number.
b. Return the unit to: Lorex Service Center.
300 Alden Road, Markham, Ont. L3R 4C1

iii) If the unit was purchased in Europe please visit:

www.lorexinternational.com for return instructions.

TOLL FREE CUSTOMER SUPPORT
North America: 1-888-42-LOREX (1-888-425-6739)
Local: 905-940-5355
International: 800-42-LOREX 0 (800-425-67390)
www.lorexcctv.com

Always use discretion when installing video and/or audio surveillance equipment especially when there is perceived privacy. Inquire regarding federal, state and/or local regulations applicable to the lawful installation of video and or audio recording or surveillance. Party consent may be required.

GARANTIE LIMITÉE DES PRODUITS LOREX

Lorex garantit à l'acheteur original (ci-après désigné comme étant "l'acheteur") dans un magasin au détail seulement, et que ce produit (ci-après désigné comme étant le "produit"), s'il est installé correctement et - s'il y a lieu - utilisé conformément aux instructions ci-incluses, et le disque CD-ROM qui comporte le logiciel, seront libres de tout défaut de fabrication, tant dans les pièces que la main-d'oeuvre, pourvu que le produit soit utilisé dans des conditions normales et installé et utilisé strictement selon les instructions incluses dans le guide qui l'accompagne.
Cette garantie couvrira la période mentionnée ci-dessous (ci-après désignée comme étant la "période de garantie"), commençant le jour où l'acheteur se procure le produit à l'état neuf dans un magasin au détail.
Pièces et main-d'oeuvre : *1 année (les pièces couvertes n'incluent pas les ampoules, voyants à DEL ni les piles).*
Les obligations de Lorex selon les termes de cette garantie se limitent exclusivement aux points suivants :
- Lorex se réserve le droit de réparer ou de remplacer, sa seule discrétion, le logiciel et/ou le matériel.
- Le remplacement des pièces sous garantie que Lorex estime être défectueuses dans le produit ou le disque CD-ROM ou, à sa seule discrétion, le remplacement du produit jugé défectueux.
- Si Lorex ne peut réparer ni remplacer le produit ou le disque CD-ROM, rembourser la valeur monétaire du produit ou du disque CD-ROM en cours au moment de l'achat.

Toutes les pièces remplacées par Lorex seront couvertes pendant la période résiduelle de la garantie dudit produit.

Exclusions de la garantie
Pour obtenir du service, veuillez vous assurer que vous avez inscrit votre produit en ligne (www.lorexcctv.com) dans la section d'abonnement à la garantie. Cette garantie ne couvre pas les ampoules, voyants à DEL ni les piles incluses avec le produit ou faisant partie de celui-ci.
Cette garantie deviendra nulle si des accessoires autres que ceux vendus ou distribués par Lorex sont utilisés ou ont été utilisés conjointement avec le produit ou si des modifications ou des réparations ont été effectuées au produit par une entité autre qu'un centre de service autorisé par Lorex.

Cette garantie ne s'applique pas aux défauts ni aux dommages survenus suite à une utilisation anormale du produit (incluant des conditions atmosphériques et des taux d'humidité anormaux) ou suite à une installation ou une utilisation du produit autre que celle décrite dans le guide accompagnant le produit.

Cette garantie ne s'applique pas aux défauts ni aux dommages causés au produit suite à (i) une utilisation insouciante du produit, (ii) mauvaise utilisation, abus, négligence, modification ou mauvaise installation du produit, (iii) court-circuits ou transitoires électriques, (iv) tout usage de l'acheteur qui ne correspond pas à l'installation prescrite du produit, (v) l'utilisation de pièces non fournies par Lorex, (vi) un entretien inadéquat du produit, ou (vii) tout accident, incendie, inondation ou autres désastres naturels.

Cette garantie ne couvre pas la performance ni la fonctionnalité de tout logiciel informatique inclus avec le produit. Cette garantie ne couvre pas les défauts que pourrait contenir le support optique (disque CD-ROM) ou magnétique (disquette), tel qu'un CD-ROM brisé ou comportant un défaut qui l'empêcherait d'être lu adéquatement par le lecteur de disque de votre ordinateur. Lorex ne garantit pas que le logiciel fourni avec le produit fonctionnera sans interruption ni qu'il sera libre de tout défaut, d'erreurs ou de 'bogues'. Lorex ne garantit pas le logiciel inclus à moins que cela ne le soit mentionné spécifiquement dans l'entente de la licence incluse avec le produit. Cette garantie ne couvre pas les frais se rapportant à l'enlèvement ni à la réinsertion de tout produit, logiciel, périphérique ou disque CD-ROM installé sur votre ordinateur.

Lorex se réserve le droit de modifier la conception ou d'apporter des ajouts ou des améliorations à ses produits, sans obligation de sa part de modifier les produits déjà fabriqués. Lorex fera tout en son pouvoir pour fournir des améliorations et des réparations à son logiciel via son site web.
Cette garantie ne couvre pas les altérations ni les dommages effectues tout autre logiciel, ni les bogues pouvant résider de fa on permanente sur le système de l'utilisateur suite l'installation du logiciel ci-inclus.

Cette garantie a préséance sur toutes les autres garanties tacites ou explicites, incluant la garantie en qualité loyale et marchande et les aptitudes visant toute autre obligation ou responsabilité de la part de Lorex, et par les présentes, Lorex n'autorise aucune personne ni entité à assumer pour elle nulle autre responsabilité en rapport avec la vente de ce produit. Lorex ne sera pas tenue responsable, en aucune circonstance, des dommages-intérêts directs ou indirects survenant de l'utilisation du produit ou suite au mauvais fonctionnement ou à l'absence de fonctionnement dudit produit, ainsi que pour tout délai dans l'exécution de cette garantie suite à des circonstances hors du contrôle de Lorex.

Lorex ne garantit d'aucune manière l'apparence extérieure du produit, ni les pièces ou accessoires incluant, mais ne s'y limitant pas, le boîtier, les pièces du boîtier, les boutons, etc., ainsi que le déballage, l'installation, l'enlèvement et la réinstallation du produit après une réparation.

Lorex ne garantit pas et ne fait aucune revendication en ce qui a trait au potentiel, à la capacité ou l'efficacité de prévenir, réduire ou d'une façon quelconque, d'influer sur les dommages à la propriété privée ou sur les blessures corporelles. Lorex ne sera pas tenue responsable des blessures corporelles, dommages à la propriété personnelle, perte ni au vol se rapportant de près ou de loin au produit ou son usage dans un cadre malveillant, qu'il soit physique ou mental. Lorex n'autorise aucunement les représentants, détaillants ou grossistes, à faire des revendications ou des énoncés de la part de Lorex, tant par voie écrite que verbale et ces énoncés n'influent d'aucune manière sur les clauses de cette garantie.

La seule responsabilité de Lorex, selon les termes de cette garantie, qu'ils soient tacites ou explicites, se limite à une réparation, un remplacement ou un remboursement, selon les clauses décrites dans les présentes. Ces recours constituent les seuls auxquels a droit l'acheteur pour les bris des clauses de la garantie. Lorex ne sera pas responsable des dommages-intérêts spéciaux, directs ou indirects, qui résulteraient d'un bris des clauses de cette garantie ou de toute autre convention législative, incluant mais ne s'y limitant pas, les pertes de profits, pannes de courant immobilisant des équipements, la valeur ajoutée des biens incorporels, les dommages effectués au produit et à la propriété ou les coûts reliés à leur remplacement, ainsi que les frais de recouvrement, reprogrammation ou reproduction d'un programme ou des données stockées dans un système contenant le disque CD-ROM du produit ou le logiciel qui accompagne celui-ci.
L'acheteur peut bénéficier de certains droits provinciaux ou fédéraux additionnels et toute clause de cette garantie qui soit prohibée par de telles lois sera jugée nulle et sans effet mais les autres clauses demeureront en vigueur.

Lorex ne garantit pas que ce logiciel fonctionnera conjointement avec tout autre logiciel ou suite logicielle, ˆ moins que cela ne soit indique. Lorex ne sera pas tenue responsable des caractéristiques ni des fonctions du matériel ou des logiciels d'un tiers pouvant entrer en conflit avec le fonctionnement du logiciel ci-inclus.

Toutes les garanties tacites ou explicites se limitent à la durée de la garantie limitée. Aucune garantie ne sera applicable après cette période de temps. Certains états ou provinces ne permettent pas de restrictions en ce qui a trait aux termes d'une garantie tacite, ni d'exclusions aux dommages-intérêts directs ou indirects et il se peut que ces restrictions ne s'appliquent pas à vous. Cette garantie donne à l'acheteur original des droits spécifiques et il se peut que d'autres droits, variant d'un état ou d'une province à l'autre, puissent lui être conférés.

Obtention du service
Si l'acheteur a besoin de service pour son produit, selon les termes de cette garantie limitée, il doit fournir à Lorex une copie de la facture d'achat affichant clairement la date et l'endroit où le produit a été acheté. Sans cette preuve d'achat, Lorex ne sera pas dans l'obligation de remplir ses obligations envers l'acheteur. Si vous retournez le produit et/ou le disque CD-ROM à Lorex, vous devez assumer le risque que ceux-ci soient endommagés ou perdus au cours de l'expédition. Vous devez emballer le produit dans sa boîte originale ou un emballage adéquat et vous devez défrayer les coûts d'expédition à l'une des adresses mentionnées ci-dessous.
Pour bénéficier du service sous garantie, vous devez suivre les étapes ci-dessous :

1. Emballez le produit dans une boîte solide et remplie de matériau d'expédition.
2. i) Si l'appareil a été acheté aux États-Unis, suivez ces étapes-ci :
   a. Veuillez contacter notre département de service à la clientèle pour obtenir un numéro d'autorisation pour le retour.
   b. Retournez le produit à : Lorex Customer Service
      2375 Hadley Rd, Plainfield, IN 46168
   ii) Si l'appareil a été acheté au Canada, suivez ces étapes-ci :
   a. Veuillez contacter notre département de service à la clientèle pour obtenir un numéro d'autorisation pour le retour.
   b. Retournez le produit à : Lorex Customer Service
      300 Alden Road, Markham, ON L3R 4C1
   iii) Si l'unité a été achetée dans Europe veuillez visiter : www.lorexinternational.com pour les instructions de retour

COMPOSEZ LA LIGNE D'ASSISTANCE SANS FRAIS AUS CONOMMATEURS:
L'Amérique du nord: 1-888-42-LOREX (1-888-425-6739)
Local : 905-940-5355
International : 800-42-LOREX 0 (800-425-67390)
www.lorexcctv.com

Soyez toujours très discret lorsque vous installez des systèmes de surveillance, surtout dans les endroits plus retirés. Informez-vous au sujet des lois et règlements municipaux, provinciaux ou fédéraux qui s'appliquent à l'installation d'appareils de surveillance audio et vidéo. Il se peut que le consentement de la partie surveillée soit exigé.

GARANTÍA LIMITADA DEL PRODUCTO LOREX

Lorex garantiza, sólo al comprador original al por menor (el "Comprador") que este artículo (el "Producto"), si se usa e instala debidamente, y – si hay lugar - el CD-ROM en el que se proporciona el software asociado, está libre de defectos de fabricación en materiales y mano de obra, sujeto a que el Producto sea usado en condiciones normales y que sea instalado y usado estrictamente de acuerdo con las instrucciones contenidas.
Esta garantía será para los siguientes períodos de garantía (el "Período de Garantía"), a partir de la fecha en que el Comprador adquiera el Producto al por menor en la condición de no haber sido usado previamente.
Repuestos y Mano de Obra: 1 año (Las piezas garantizadas no incluyen bombillas, LEDs y baterías)
Las obligaciones de Lorex bajo esta garantía estarán limitadas a:

- la reparación o el reemplazo del producto por medio de hardware y/o software (a opción de Lorex).
- el reemplazo de cualquier parte garantizada que Lorex determine que está defectuosa en el Producto o CD-ROM o, por decisión única de Lorex, al reemplazo del Producto que Lorex encuentre defectuoso.
- Si a Lorex no le es posible reparar o reemplazar el Producto o el CD-ROM, se devolverá el valor vigente en ese momento del Producto o CD-ROM.

Se garantizará al Comprador cualquier pieza de repuesto provista por Lorex en conexión con esta garantía por un período igual a la parte no vencida del Período de Garantía del Producto.

Exclusiones de la garantía
Esta garantía no se aplica a las bombillas, LEDs y baterías suministradas con el producto o que formen parte del mismo.
Esta garantía quedará nula si se han usado accesorios que no son Lorex en el Producto o en relación con el mismo o si se hace alguna modificación o reparación al Producto en algún taller que no sea un local de servicio autorizado por Lorex.

Esta garantía no se aplica a defectos o daños resultantes del uso del producto en condiciones diferentes a las normales (incluyendo condiciones atmosféricas o de humedad normales) o por la instalación o uso del Producto en forma distinta a seguir estrictamente las instrucciones contenidas en el Manual del Propietario del Producto.

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Esta garantía no se aplica a defectos o daños al Producto causados por (i) uso negligente del Producto, (ii) mal uso, abuso, negligencia, alteración, reparación o instalación incorrecta del Producto, (iii) cortocircuitos o corrientes eléctricas transitorias, (iv) uso por el Comprador que no está de acuerdo con la instalación del producto, (v) uso de piezas de repuesto no suplidas por Lorex (vi) inadecuado mantenimiento del Producto, o (vii) accidente, incendio, inundación u otros accidentes naturales.

Esta garantía no cubre el rendimiento o funcionalidad de ningún software de computadora incluido en el paquete con el Producto. Esta garantía sólo cubre defectos en el material de CD-ROM, tal como roturas o defectos en el CD-ROM que impida que sea leído por la unidad de CD-ROM de su computadora personal. Lorex no garantiza que el software provisto con el Producto funcione sin interrupción o que de otra forma esté libre de anomalías, errores o "bugs". Lorex no ofrece ninguna garantiza con respecto a algún software provisto con el equipo a menos que específicamente se establezca de otra forma en un acuerdo de licencia que acompañe a dicho software.
Esta garantía no cubre ningún costo relativo a la remoción o reemplazo de algún Producto, CD-ROM, o software instalado en su computadora.
Lorex se reserva el derecho de hacer cambios en el diseño o hacer adiciones o mejoras a sus productos sin incurrir en ninguna obligación de modificar algún producto que ya haya sido fabricado.
Lorex tratará en lo posible de proporcionar actualizaciones y arreglos a su software por medio de su página en la red.
Esta garantía no cubre ninguna alteración ni daño a algún otro software que pueda ser instalado o pueda quedar instalado en el sistema del usuario como resultado de la instalación del software provisto.
Esta garantía es el reemplazo de otras garantías, expresas o implícitas, y Lorex no asume ni autoriza a ninguna persona a asumir por ella ninguna obligación en relación con la venta o servicio del producto. En ningún caso Lorex será responsable por ningún daño o perjuicio especial o consecuente resultante del uso del Producto o de su mal funcionamiento o incapacidad de funcionar, o por cualquier demora en la atención de esta garantía debida a causas fuera de su control.

Esta garantía no se aplicará a la apariencia o artículos accesorios incluyendo, sin estar limitado a ellos, gabinetes, piezas de gabinetes, perillas, etc., y el desembalaje, instalación, configuración, o remoción y reinstalación del producto después de ser reparado.

Lorex no hace ninguna de cada declaración ni garantía de ninguna clase con respecto al potencial, capacidad o eficacia del Producto para evitar, minimizar o en alguna forma afectar a los daños o lesiones personales o a la propiedad. Lorex no es responsable por ningún daño personal, siniestro o robo relacionado con el Producto o a su uso para cualquier daño, sea físico o mental relacionado con el mismo. Cualquier afirmación o declaración, sea escrita o verbal, hecha por vendedores, minoristas o distribuidores en sentido contrario no es autorizada por Lorex y no afecta esta disposición de esta garantía.
La responsabilidad de Lorex según ésta o cualquier otra garantía, implícita o explícita, está limitada a la reparación, reemplazo o reembolso, como se establece anteriormente. Estas compensaciones son el único y exclusivo remedio por cualquier incumplimiento de garantía. Lorex no es responsable por daños y perjuicios directos, especiales, incidentes, o consecuentes resultantes de algún incumplimiento de garantía o bajo cualquier otra teoría legal, incluyendo pero sin estar limitada a: pérdida de utilidades, paralización, plusvalía, daños o reemplazo de equipos y propiedad y cualquier costo de recuperar, reprogramar o reproducir cualquier programa o datos almacenados o usados con un sistema que contenga el CD-ROM del Producto o el software que lo acompaña.

Lorex no garantiza que el software operará con ningún otro software excepto con el que se indica. Lorex no puede ser responsable de las características de hardware o software de terceras personas que puedan afectar la operación del software incluido.

El comprador puede tener otros derechos de acuerdo con las leyes federales, provinciales o estatales y cuando toda esta garantía o parte de la misma sea prohibida por dichas leyes, será considerada nula, pero el resto de la garantía permanecerá vigente.
Todas las garantías expresadas e implícitas están limitadas en duración al período de garantía limitada. Ninguna garantía se aplicará después de dicho período. Algunos estados no permiten limitación a la duración de una garantía implícita, de modo que esta limitación puede no serle de aplicación. Algunos estados no permiten la exclusión o limitación de daños y perjuicios incidentes o consecuentes, por lo que la garantía anterior puede no serle de aplicación. Esta garantía limitada le otorga derechos legales específicos y usted puede también tener otros derechos que varía de un estado a otro.
Cómo obtener servicio

Con el fin de obtener servicio, por favor asegúrese de registrar haber registrado su producto en nuestra pagina web www.lorexcctv.com en la sección de registro de garantía. Si el Producto necesitase servicio bajo esta garantía, el Comprador debe hacer llegar a Lorex una copia del recibo o factura de compra, con su fecha respectiva, sin lo cual Lorex no estará obligada a cumplir con ninguna de sus obligaciones bajo esta garantía. Si devuelve el Producto y/o el CD-ROM a Lorex, debe usted asumir el riesgo de daño o pérdida durante el envío. Debe usar el envase original o equivalente y debe pagar el flete.
Para hacer un reclamo bajo esta garantía, proceda con los siguientes pasos.

1. Empaque el Producto en una caja robusta bien acolchada.
2. i). Si la unidad fue comprada en Estados Unidos proceda en la siguiente forma:
1.
   a. Para devoluciones por favor contacte nuestro departamento de servicio para obtener un número de autorización
   b. Devuelva la unidad a: Lorex Customer Service
      2375 Hadley Rd, Plainfield, IN 46168

   ii). Si la unidad fue comprada en Canadá proceda en la siguiente forma:
   a. Para devoluciones por favor contacte nuestro departamento de servicio para obtener un número de autorización.
   b. Devuelva la unidad a: Lorex Customer Service.
      300 Alden Road, Markham, Ont. L3R 4C1

   iii) Si la unidad fue adquirida en Europa y desea devolver el producto por favor visite: www.lorexinternational.com para obtener instrucciones.

NUMERO GRATUITO DE SERVICIO A CLIENTES:
Norteamérica: 1-888-42-LOREX (1-888-425-6739)
Internacional: 800-42-LOREX 0 (800-425-67390)
Local : 905-940-5355

www.lorexcctv.com

Use siempre discreción cuando instale equipo de vigilancia por video y/o audio especialmente cuando se percibe privacidad. Consulte acerca de las regulaciones federales, estatales y /o locales aplicables a la instalación legal de equipos de grabación o vigilancia por video y/o audio. Puede requerirse el consentimiento de las partes.

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